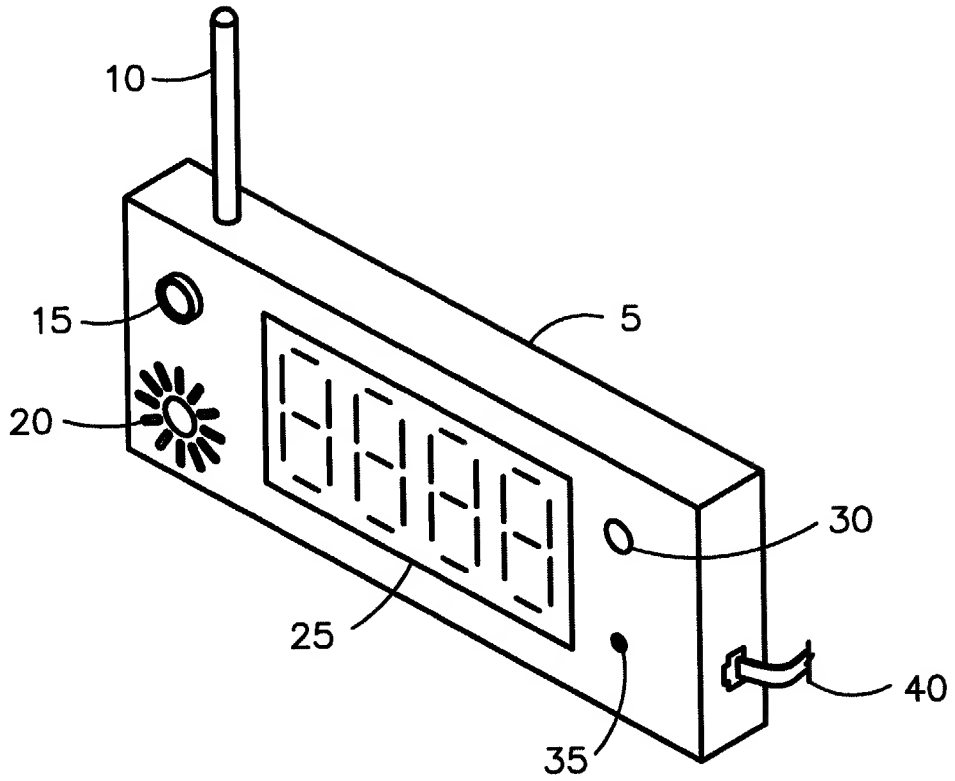


FIG. 1

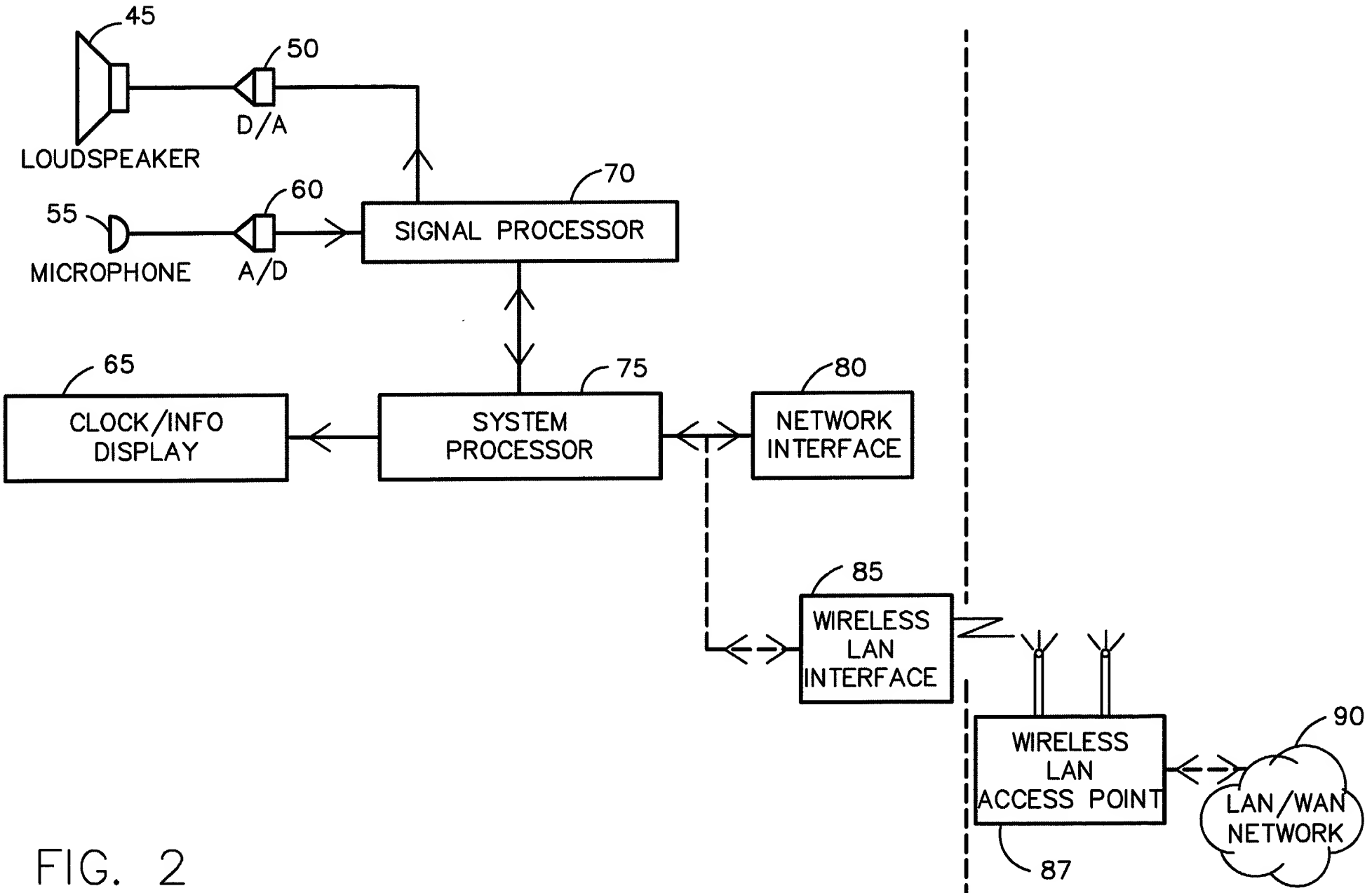


FIG. 2

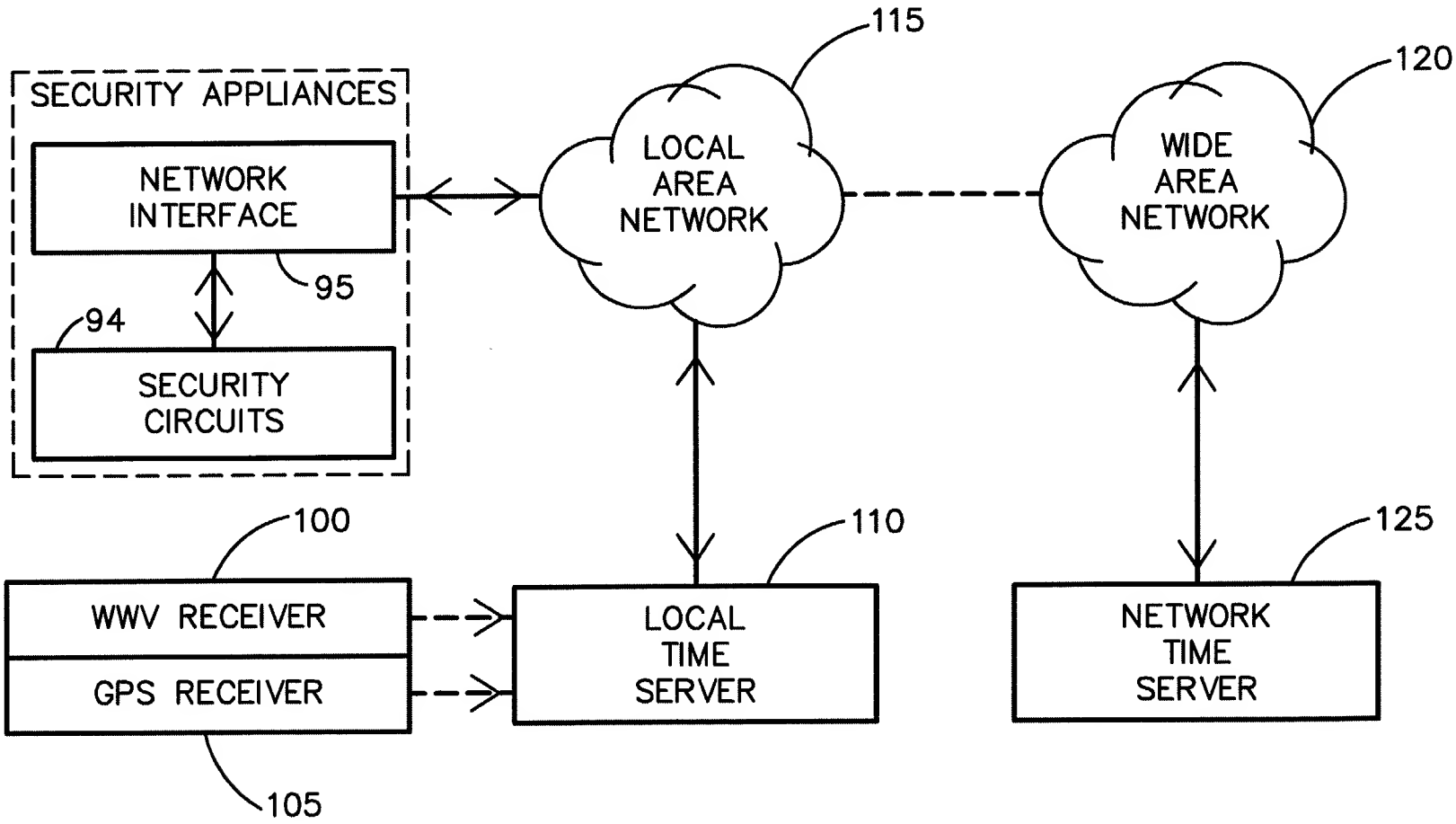


FIG. 3

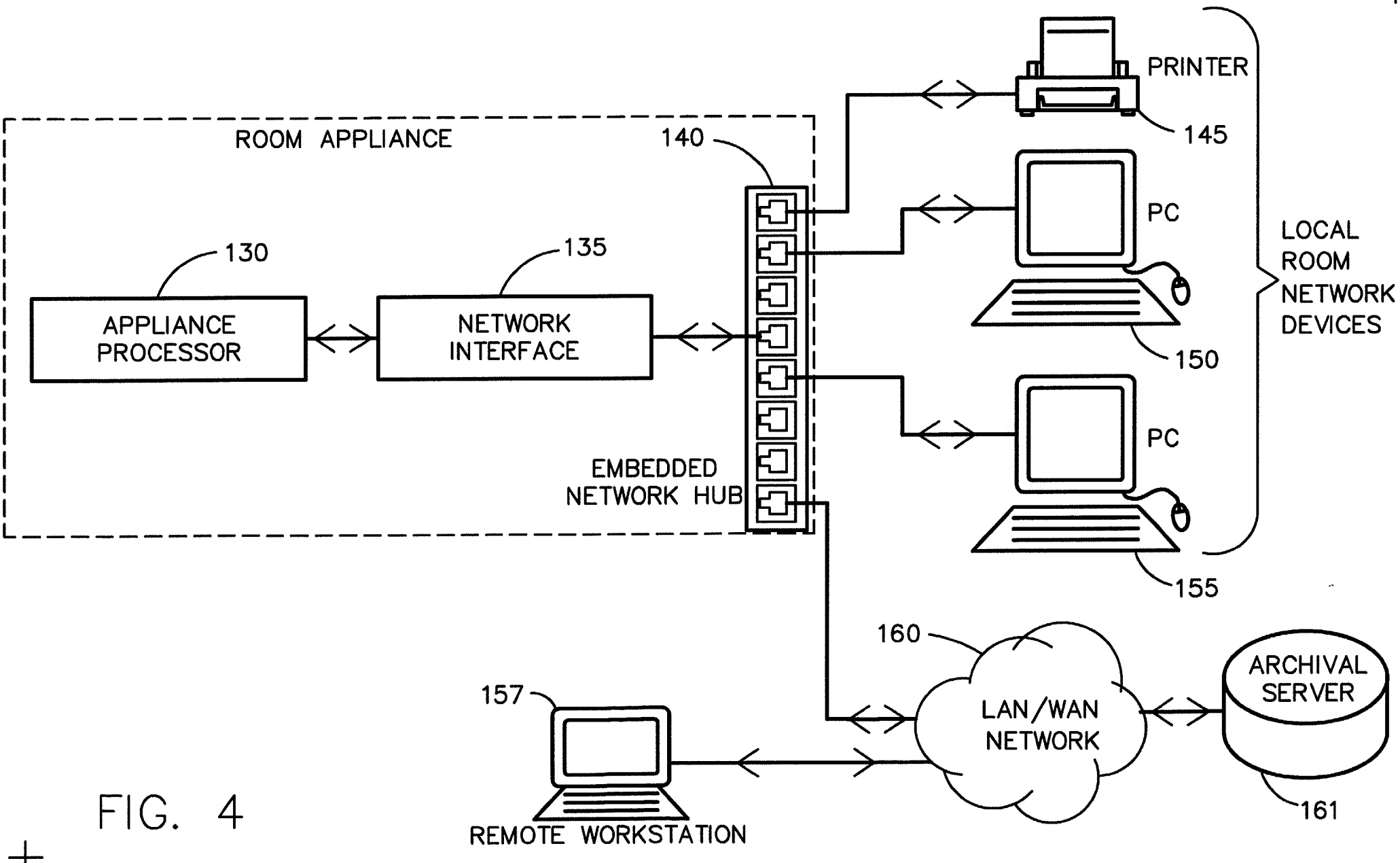


FIG. 4

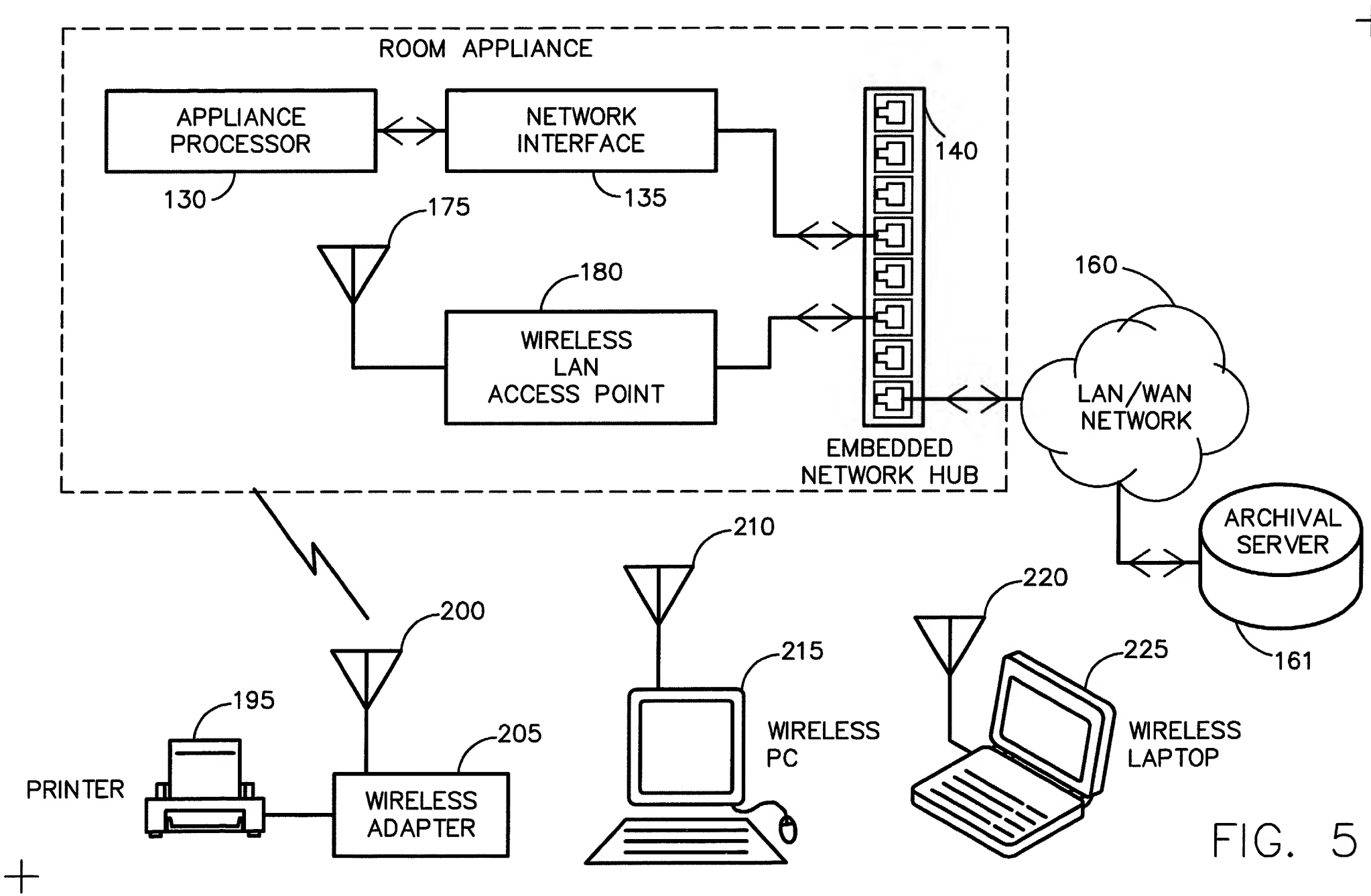


FIG. 5

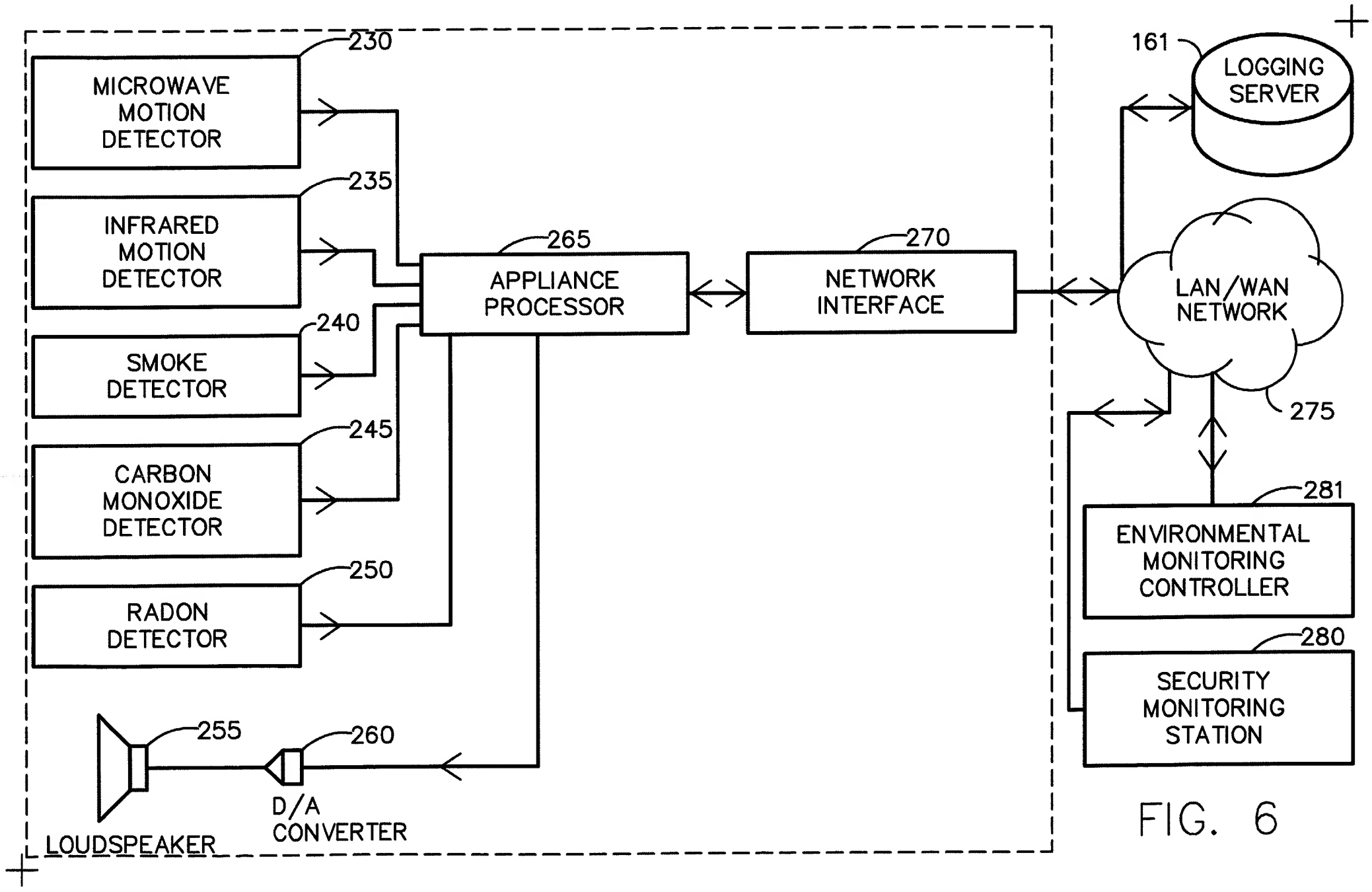


FIG. 6

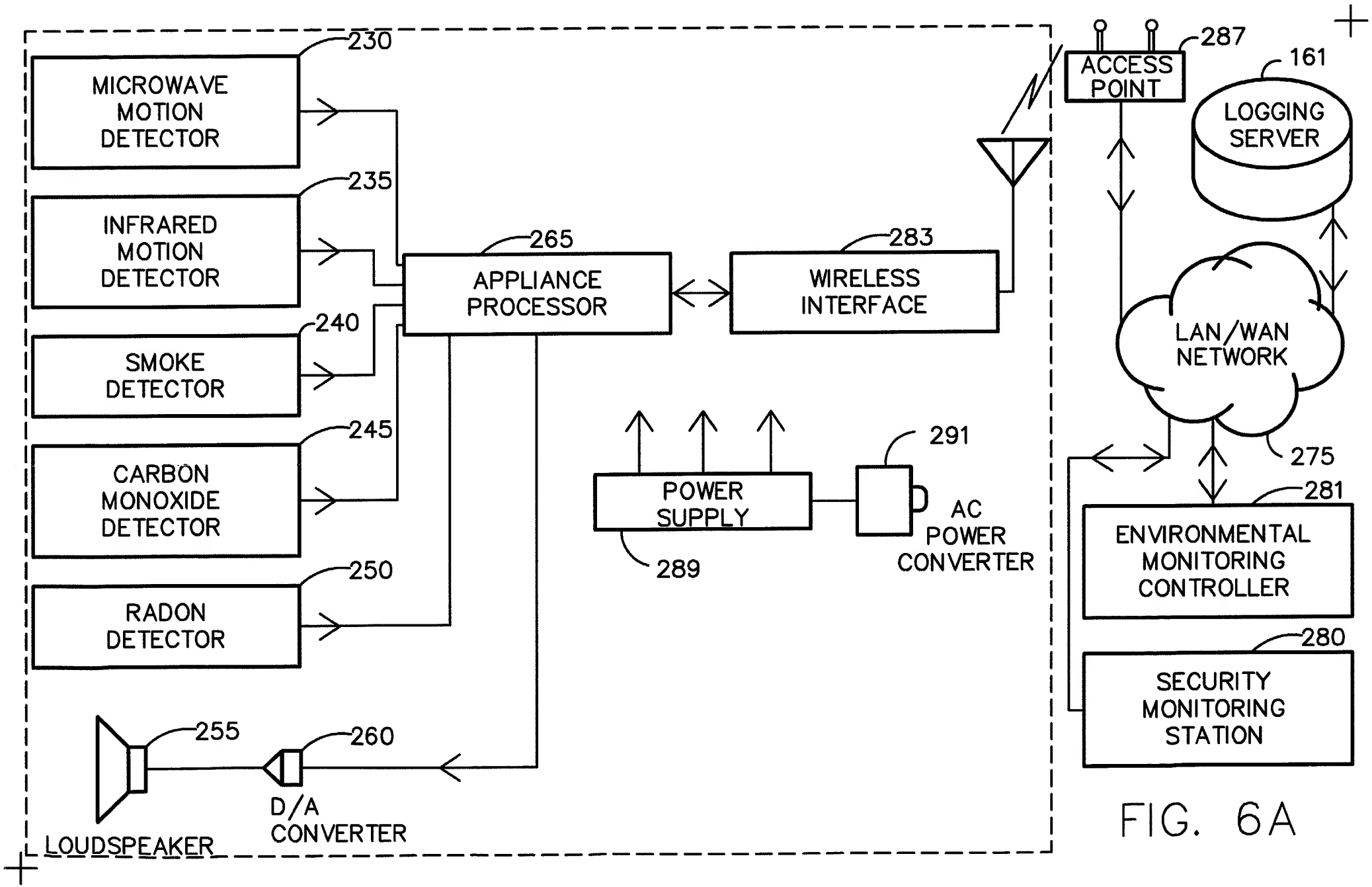


FIG. 6A

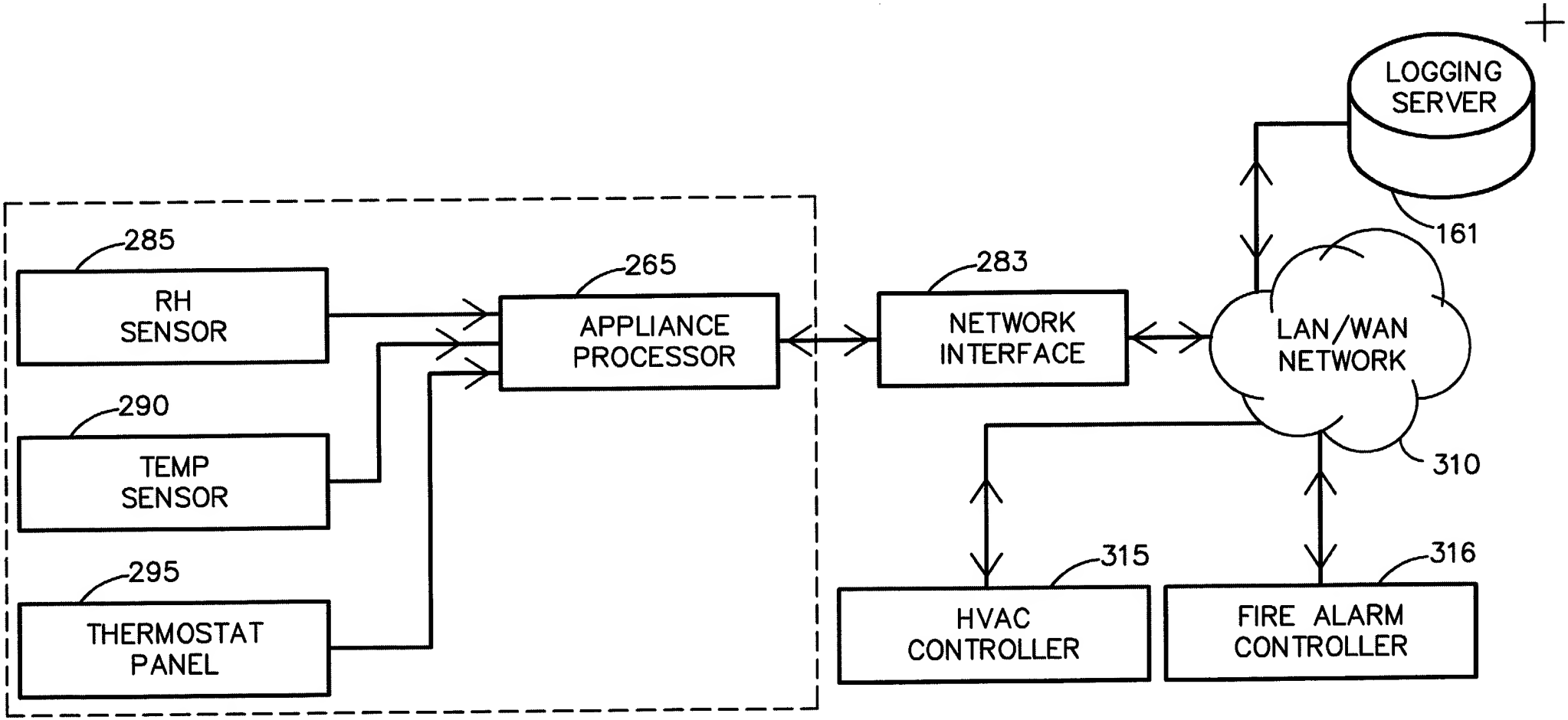


FIG. 7

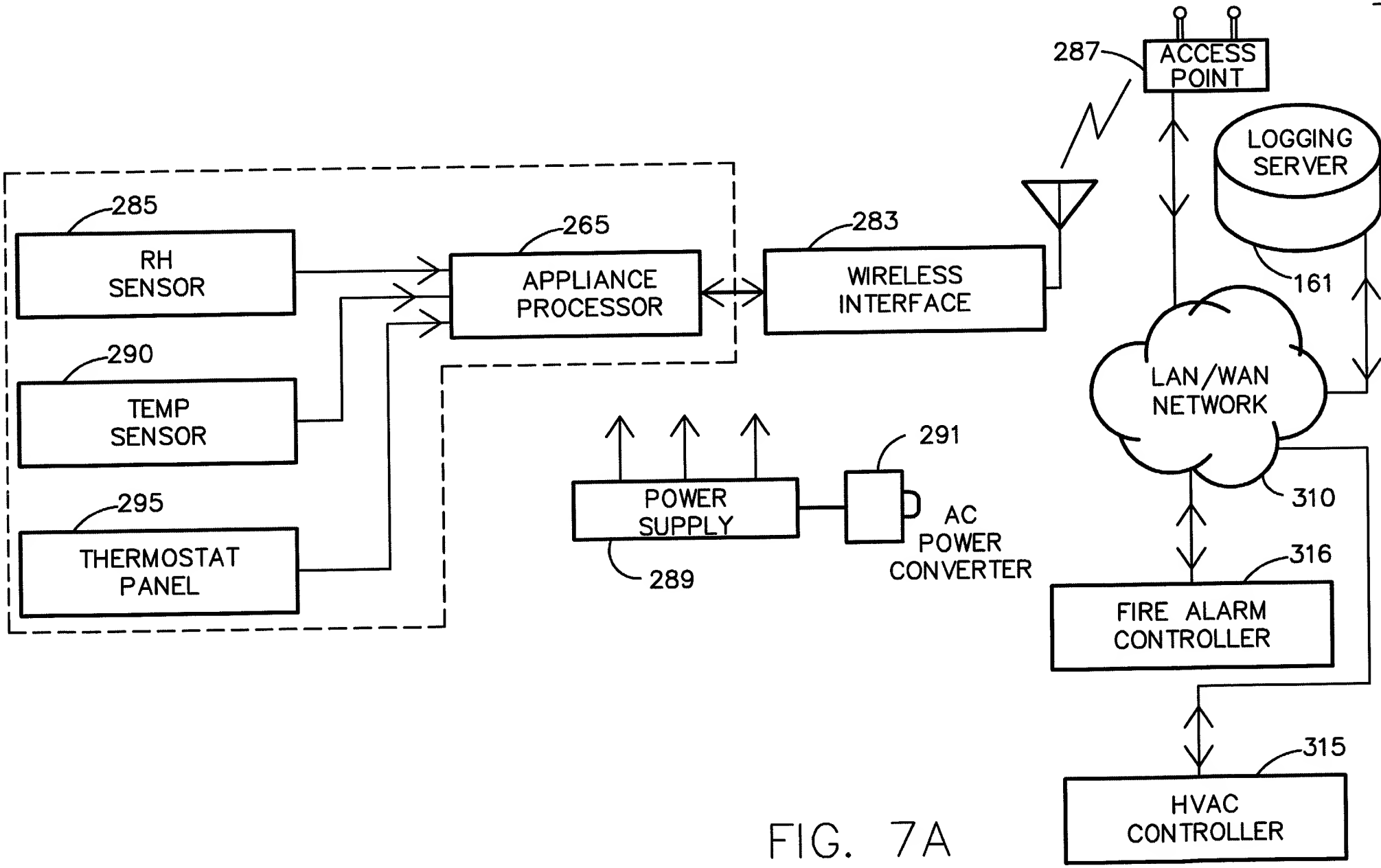


FIG. 7A

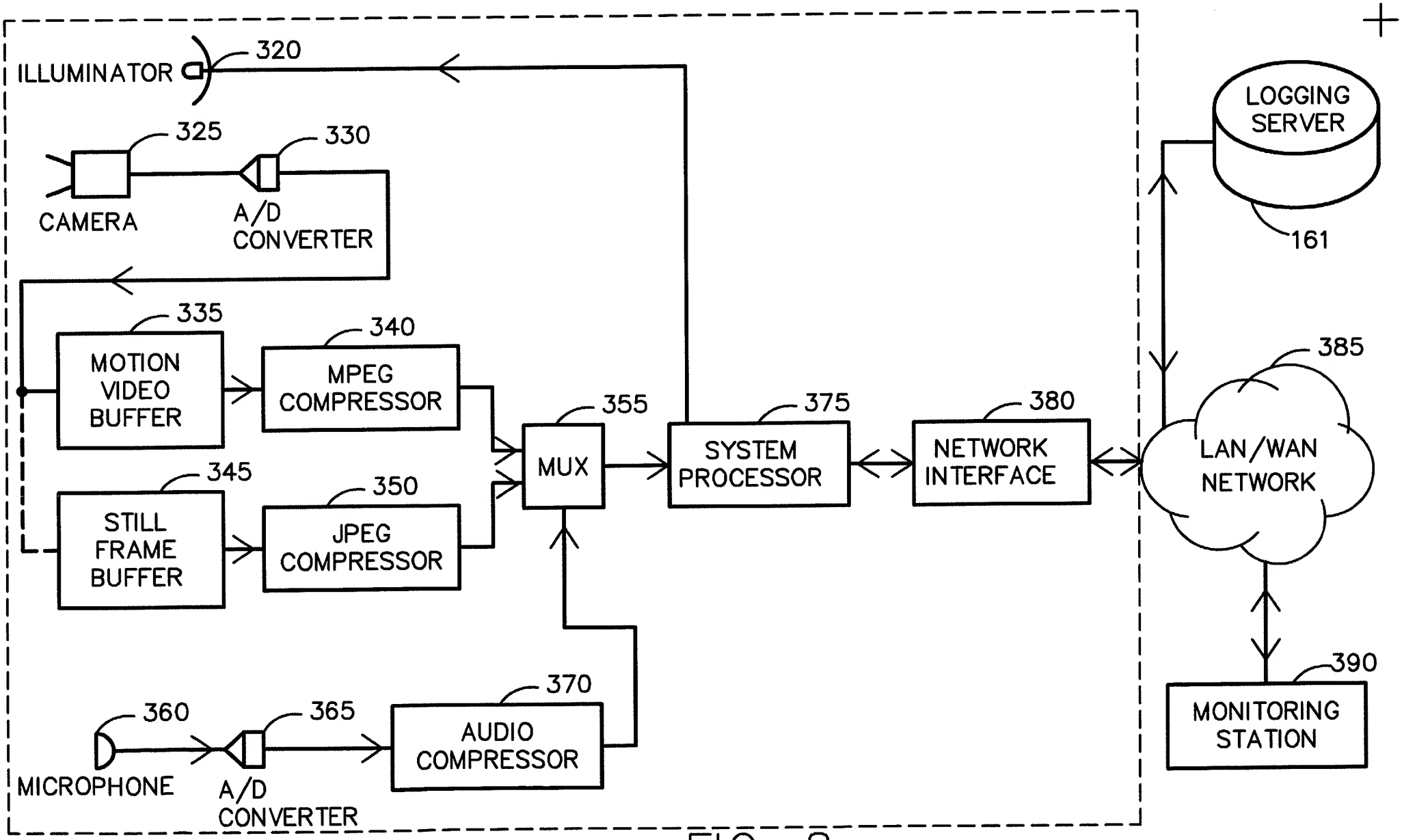


FIG. 8

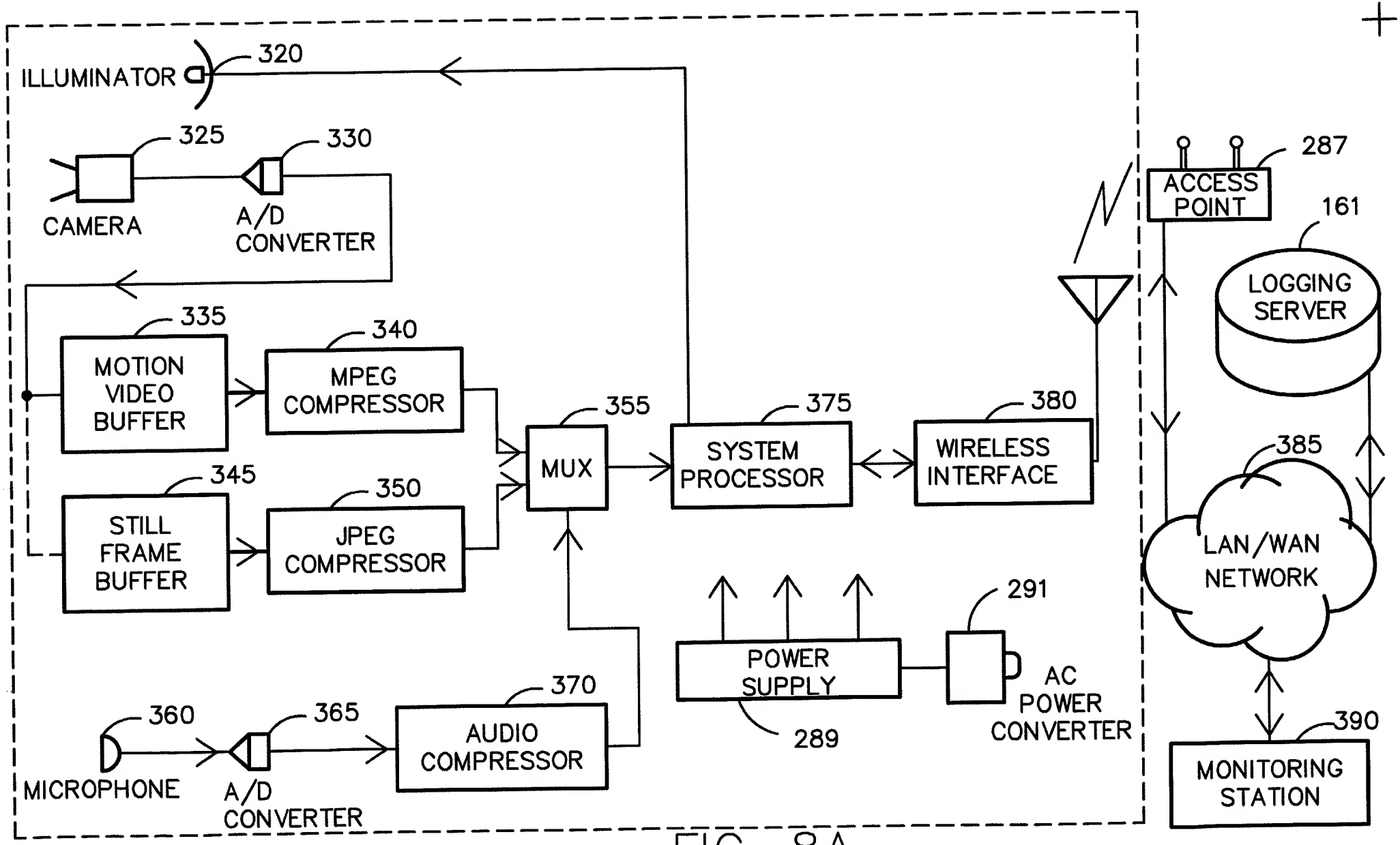


FIG. 8A

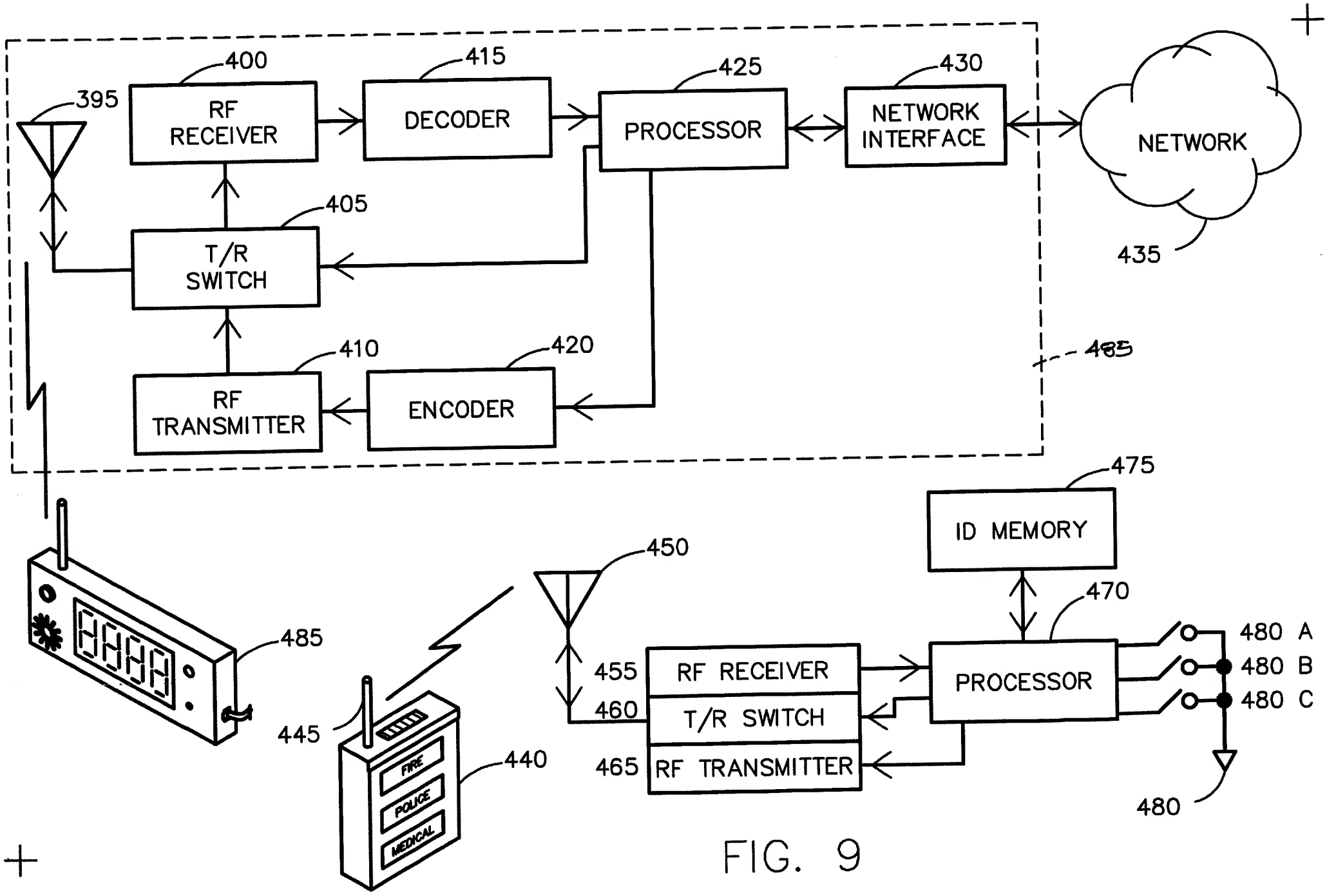


FIG. 9

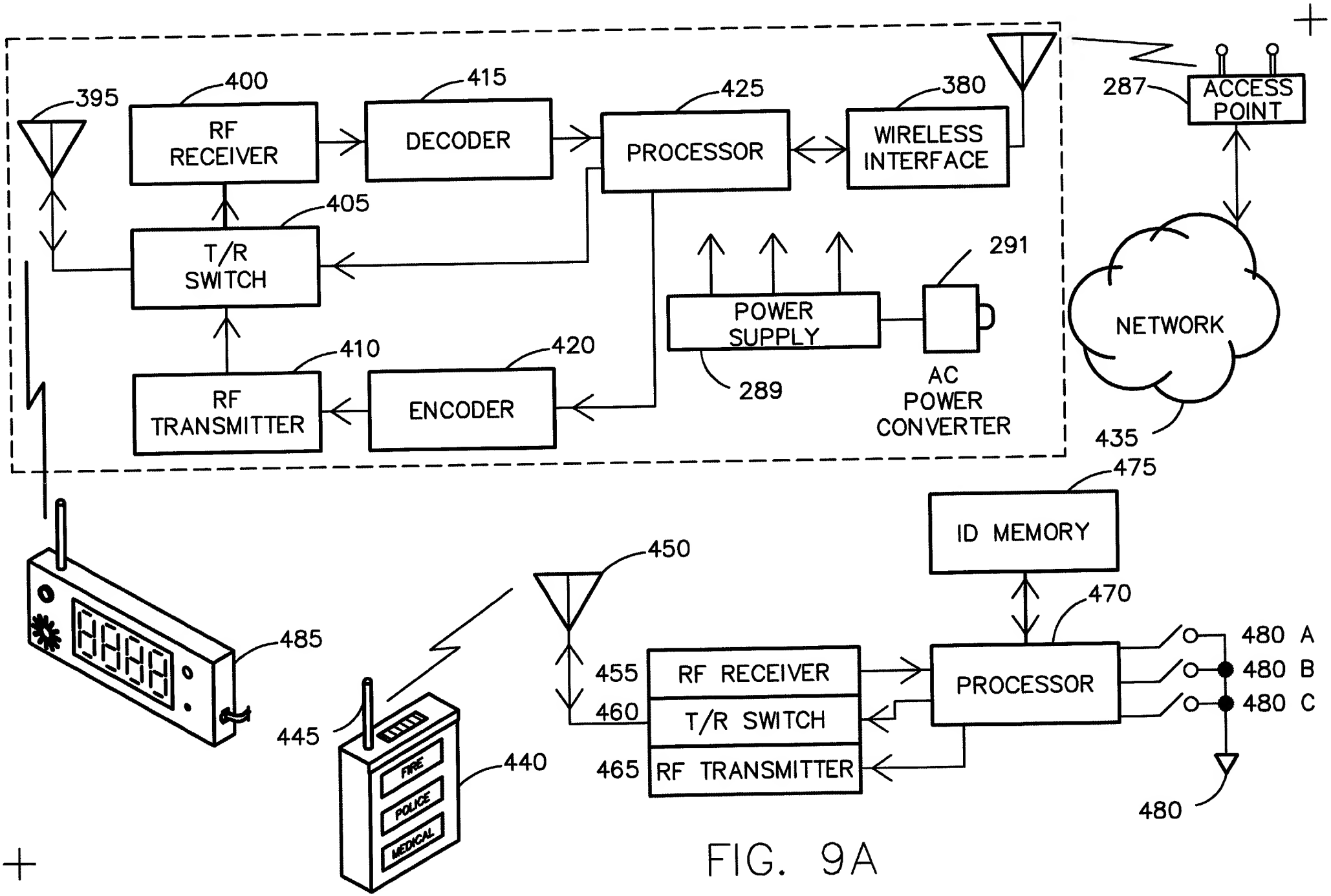


FIG. 9A

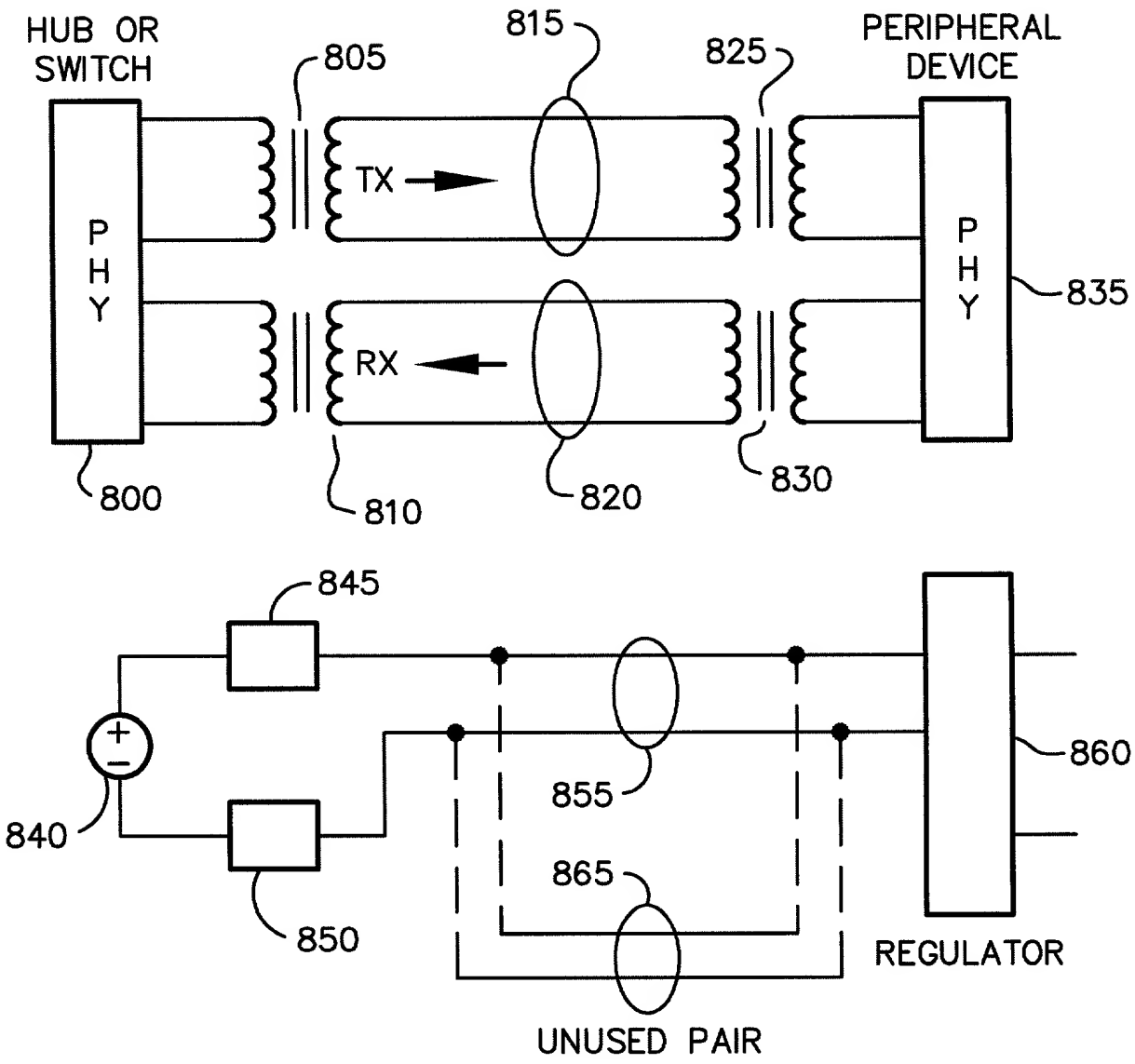

HUB OR SWITCH
805
815
825
PERIPHERAL DEVICE
PHY
TX
RX
PHY
835
800
810
820
830
845
840
850
855
860
865
REGULATOR
UNUSED PAIR

FIG. 10

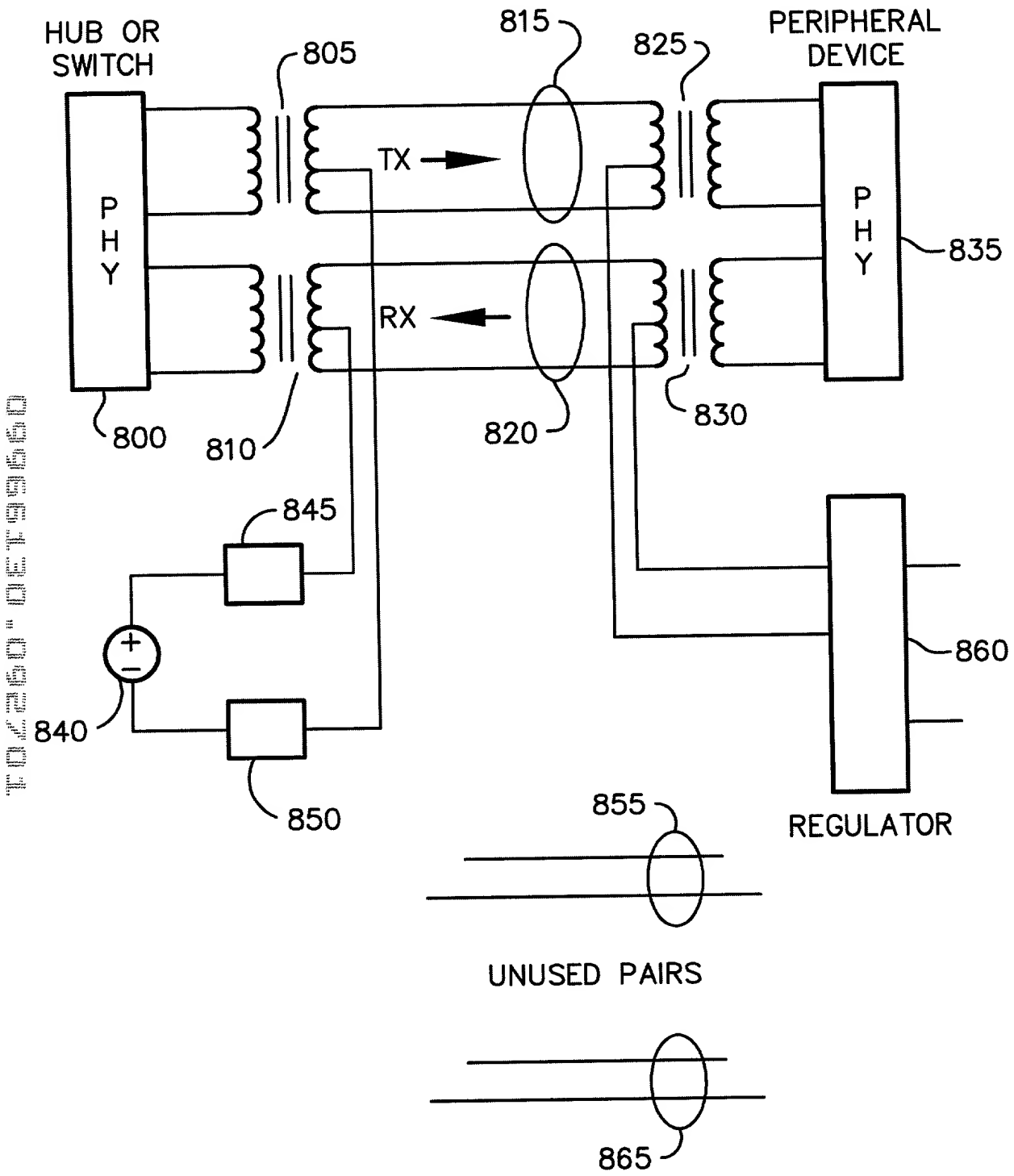
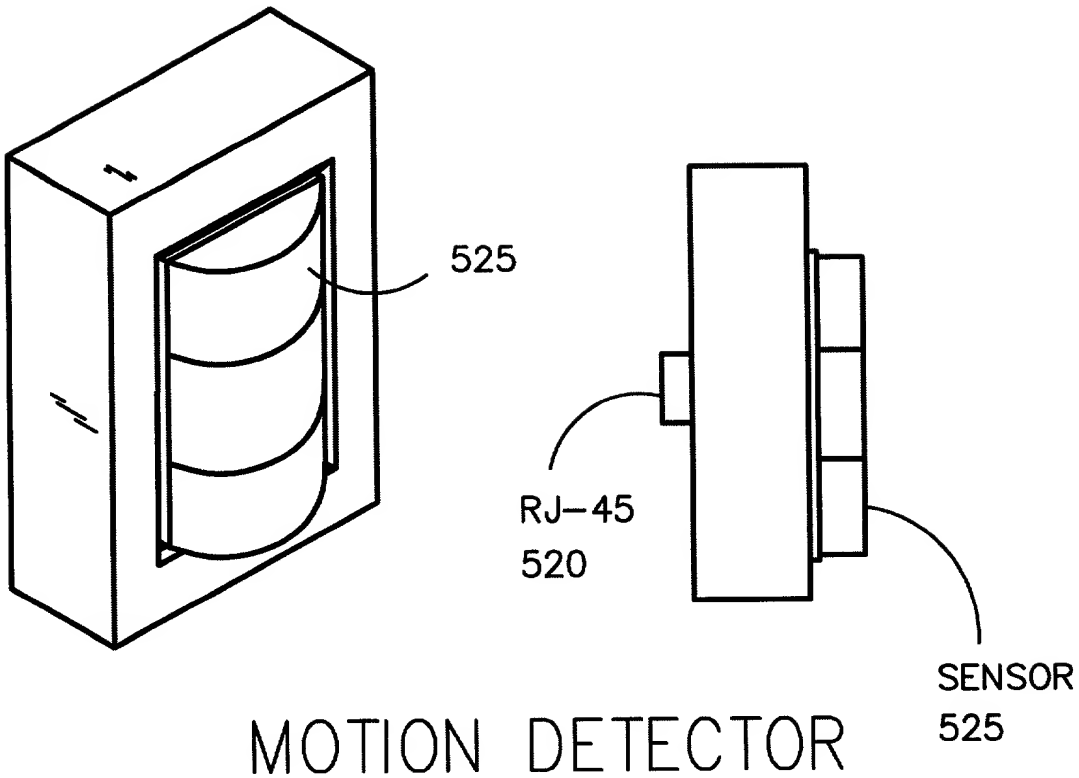

HUB OR SWITCH
805
815
825
PERIPHERAL DEVICE
TX
RX
PHY
PHY
835
800
810
820
830
845
840
850
860
855
REGULATOR
UNUSED PAIRS
865

FIG. 11


525
RJ-45
520
SENSOR
525
MOTION DETECTOR

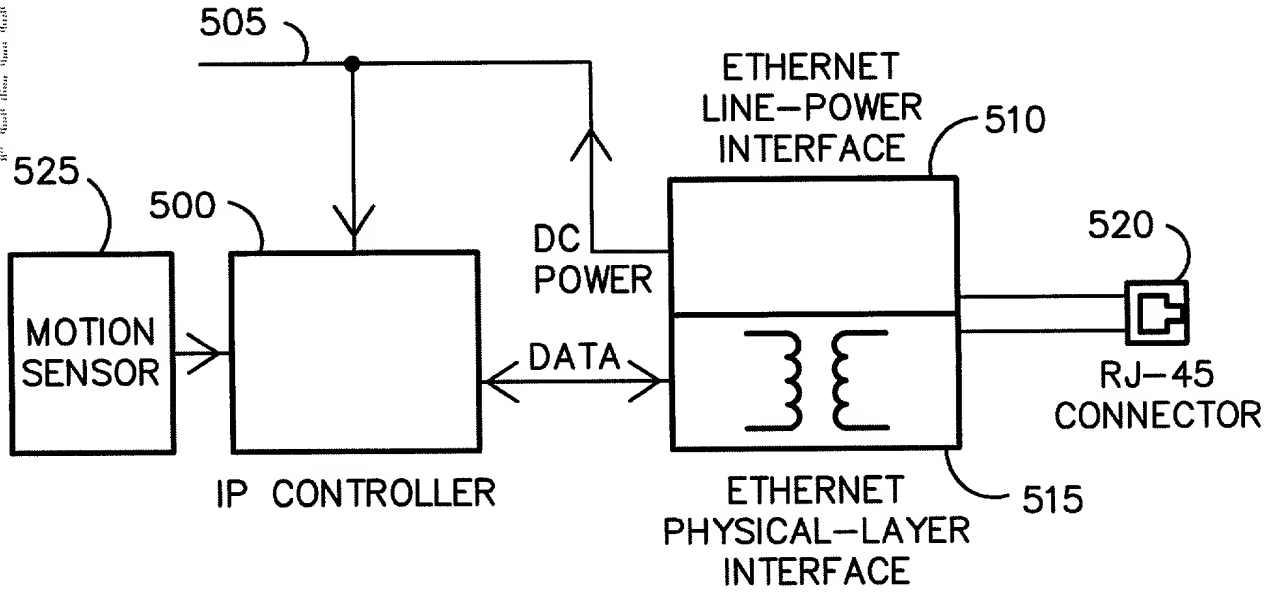
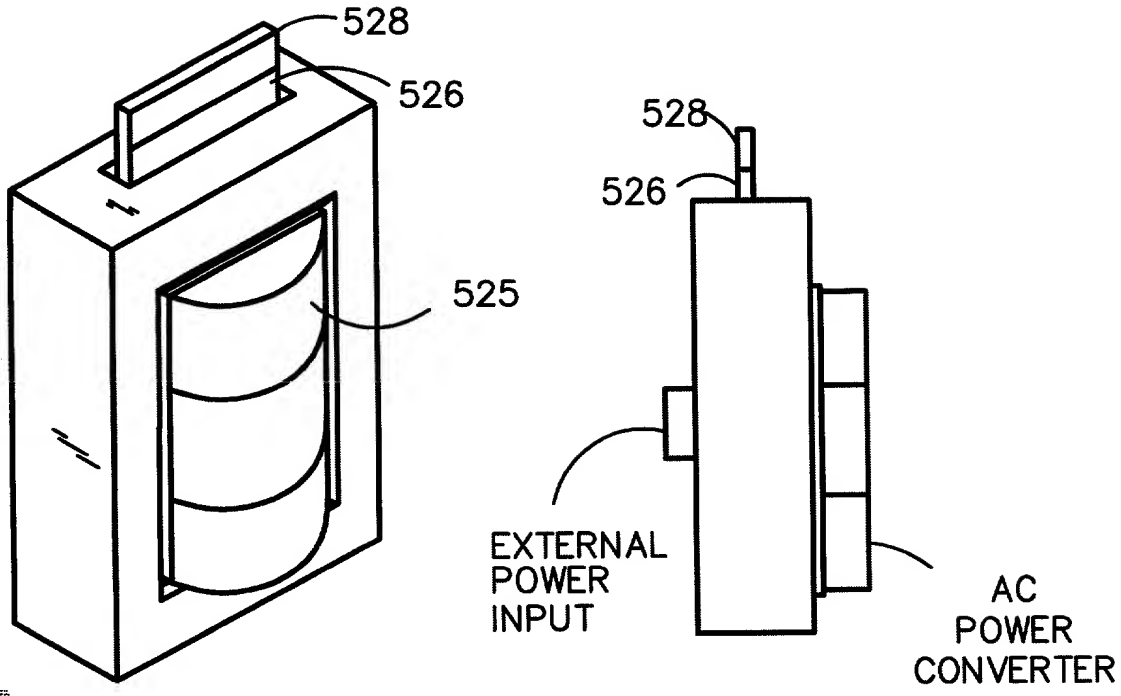

505
ETHERNET
LINE-POWER
INTERFACE
510
525
500
520
DC
POWER
MOTION
SENSOR
DATA
RJ-45
CONNECTOR
IP CONTROLLER
ETHERNET
PHYSICAL-LAYER
INTERFACE
515

FIG. 12



MOTION DETECTOR

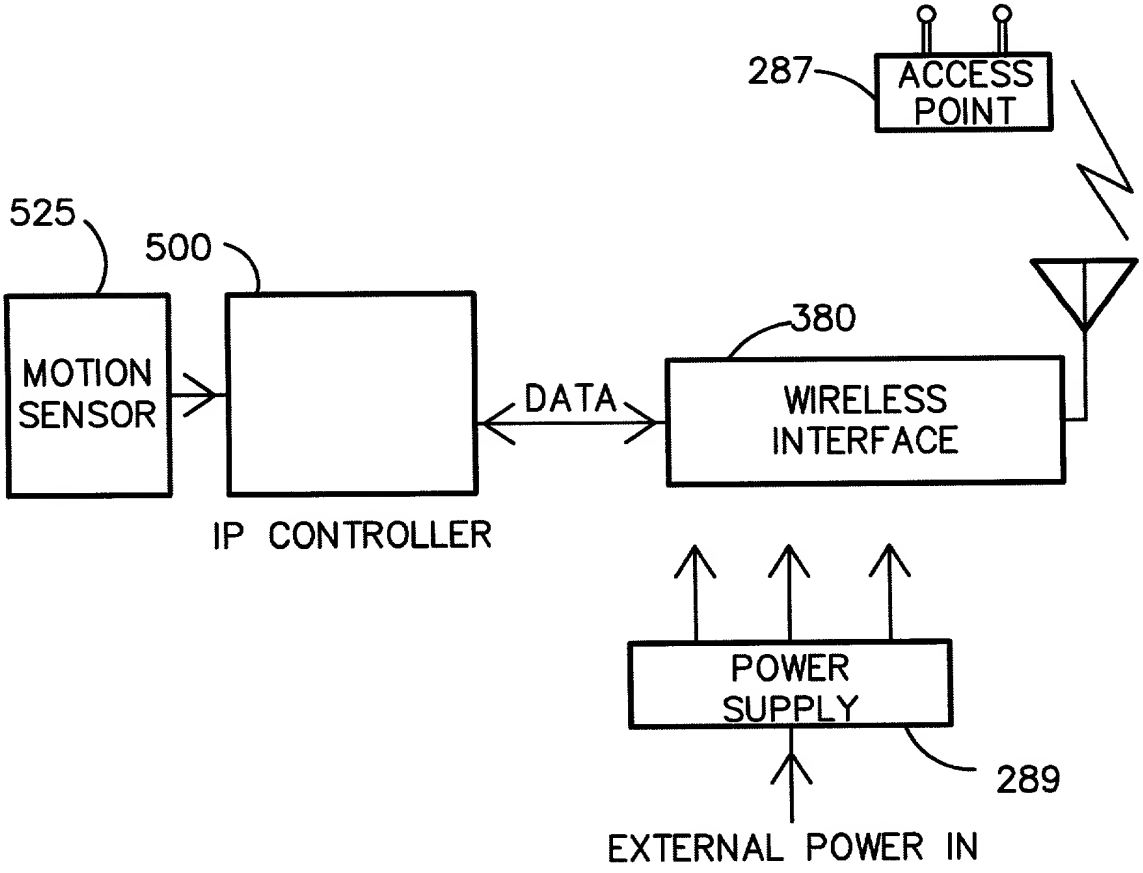
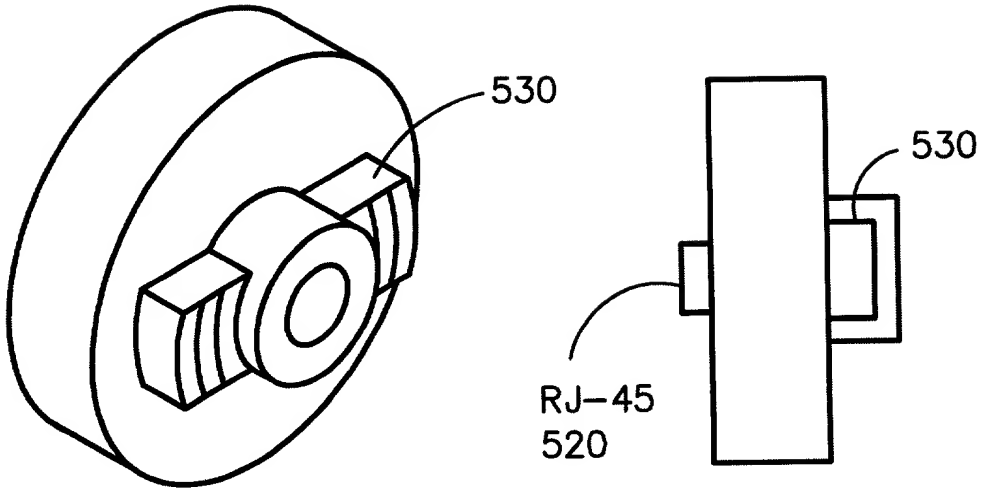


FIG. 12A



SMOKE DETECTOR OR
SMOKE & TEMP DETECTOR

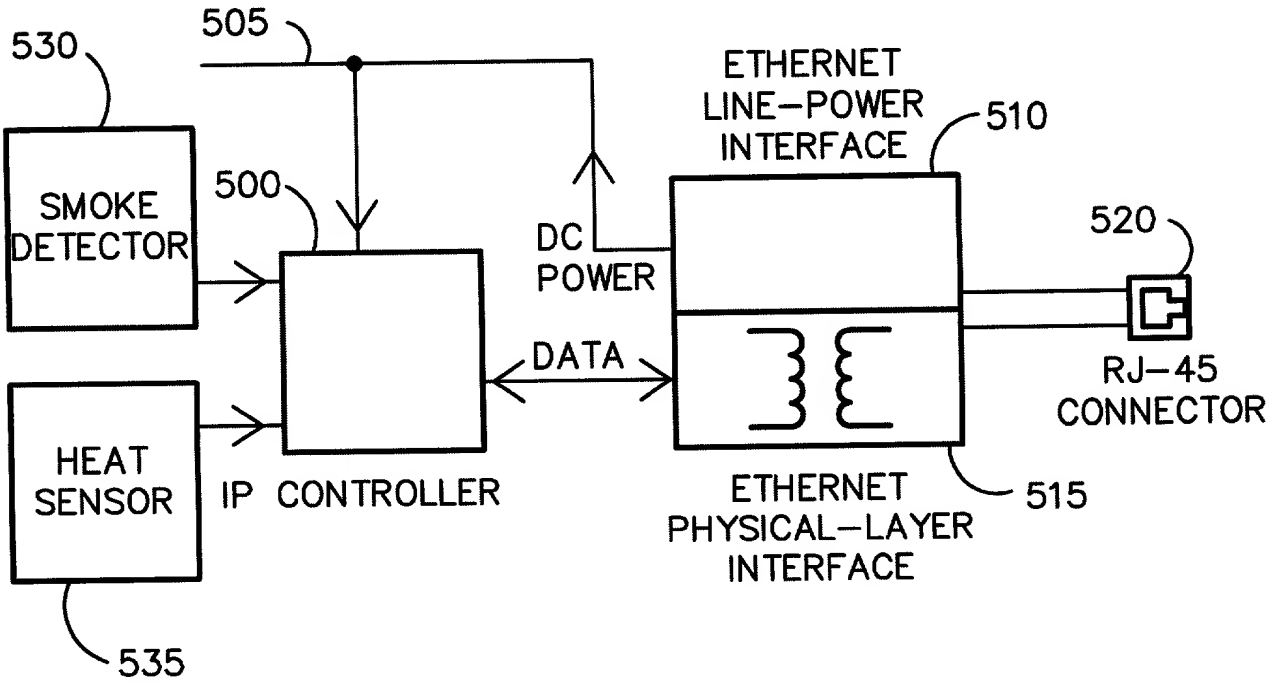
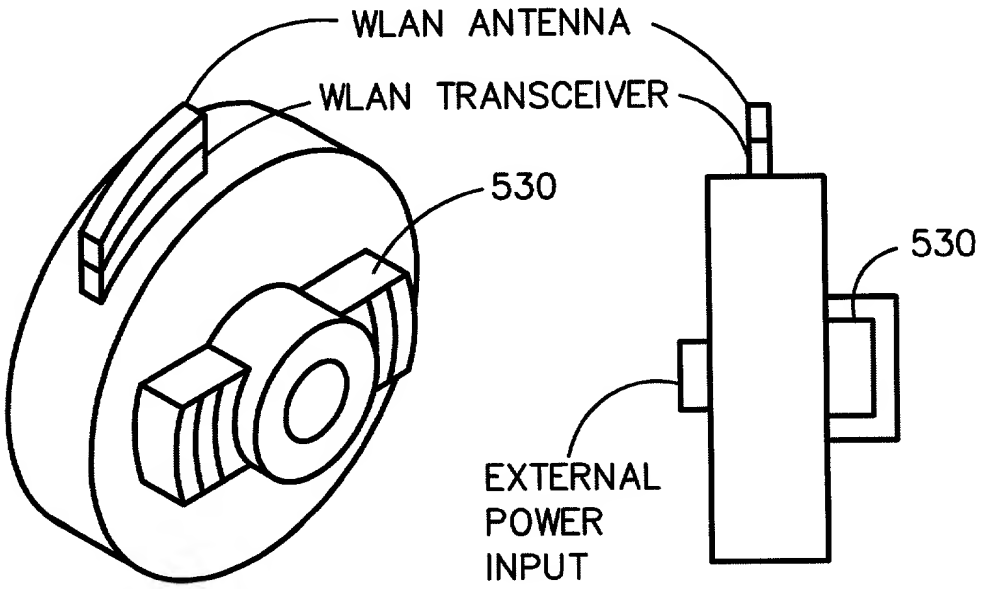


FIG. 13



SMOKE DETECTOR OR
SMOKE & TEMP DETECTOR

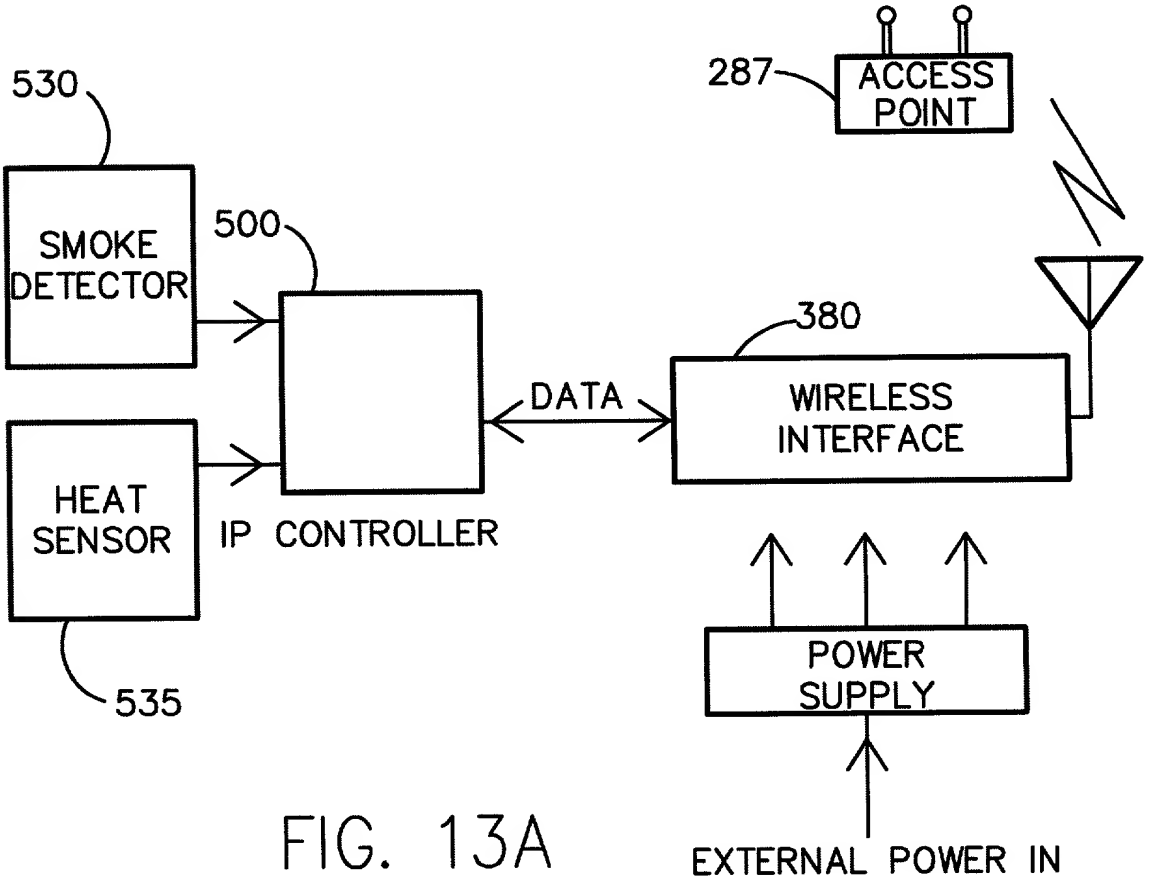
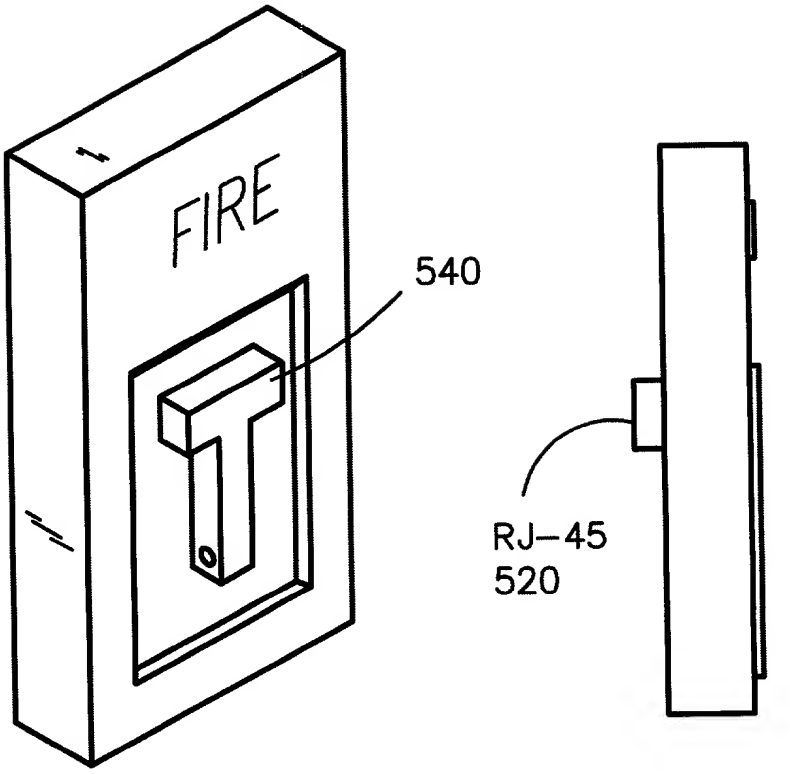


FIG. 13A



PULL HANDLE

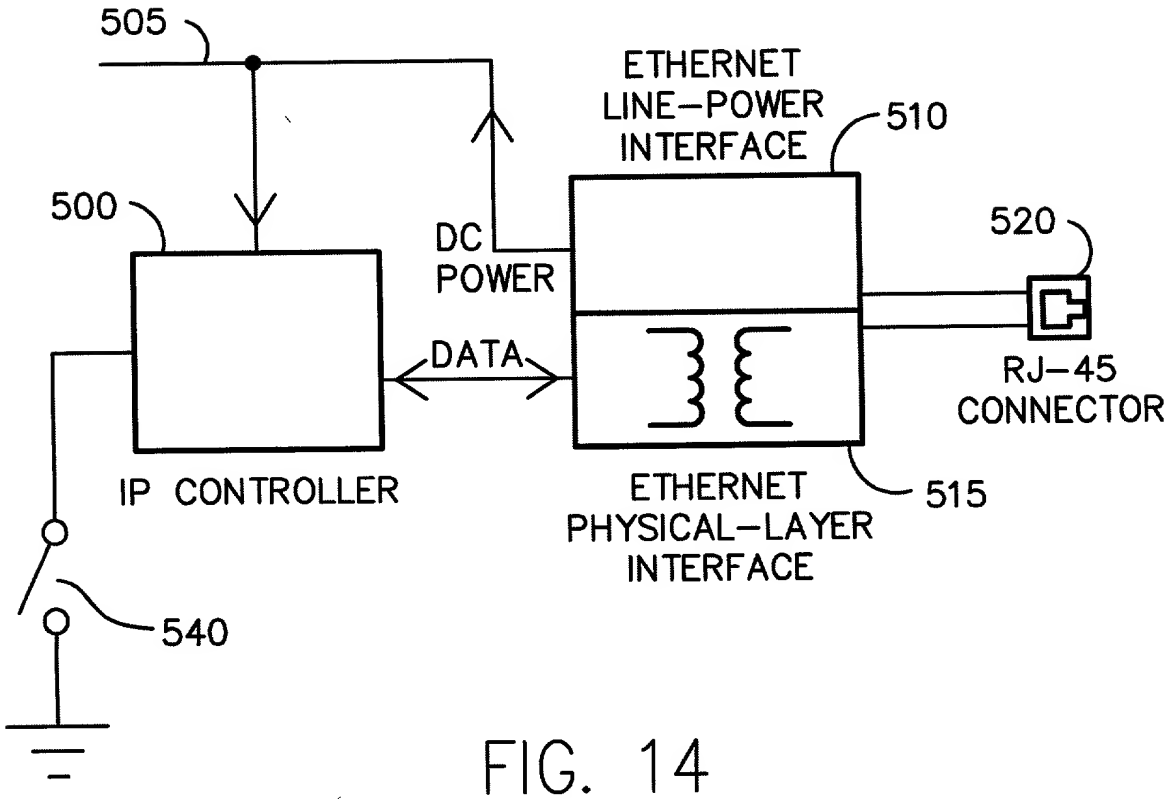


FIG. 14

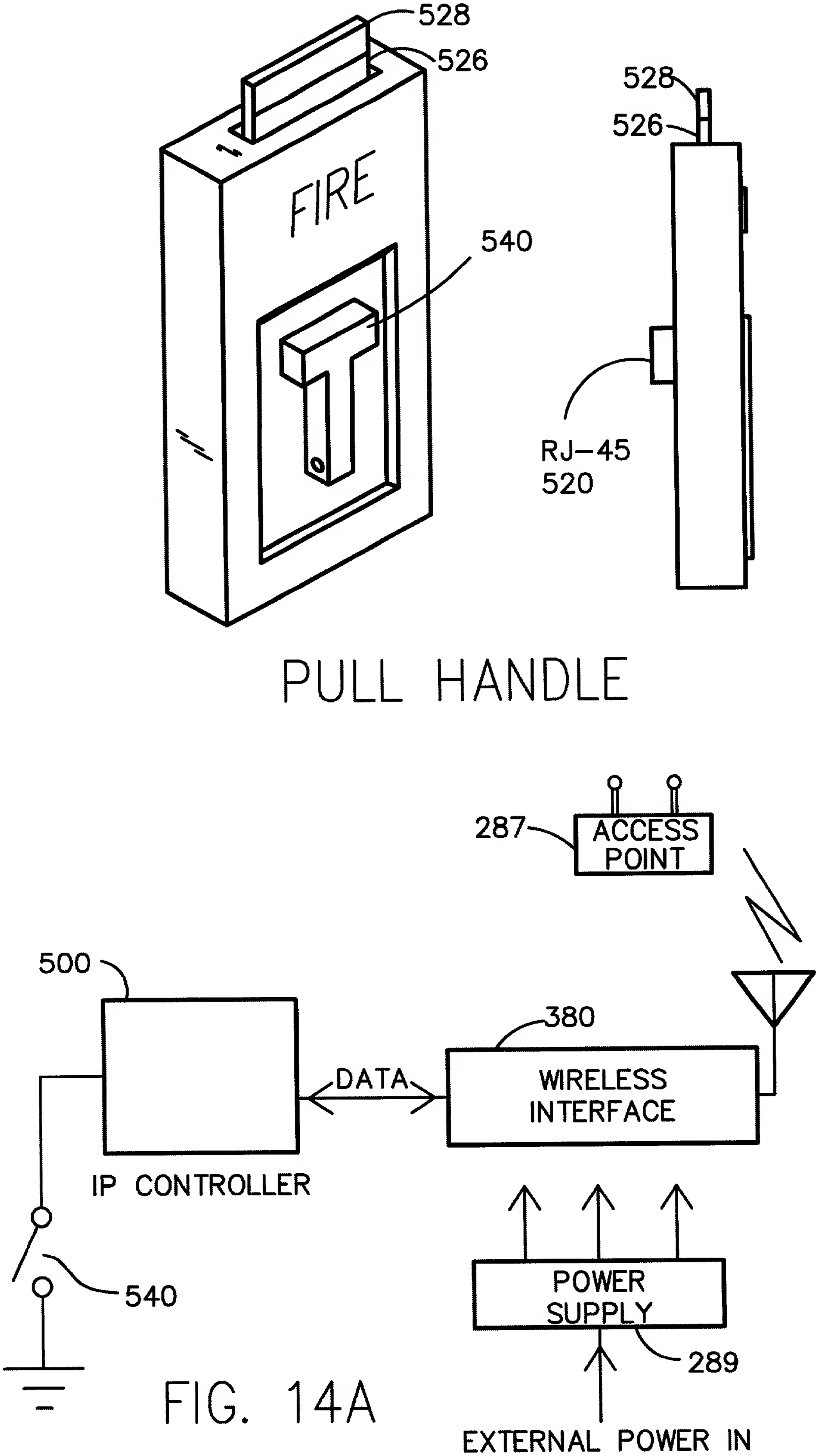
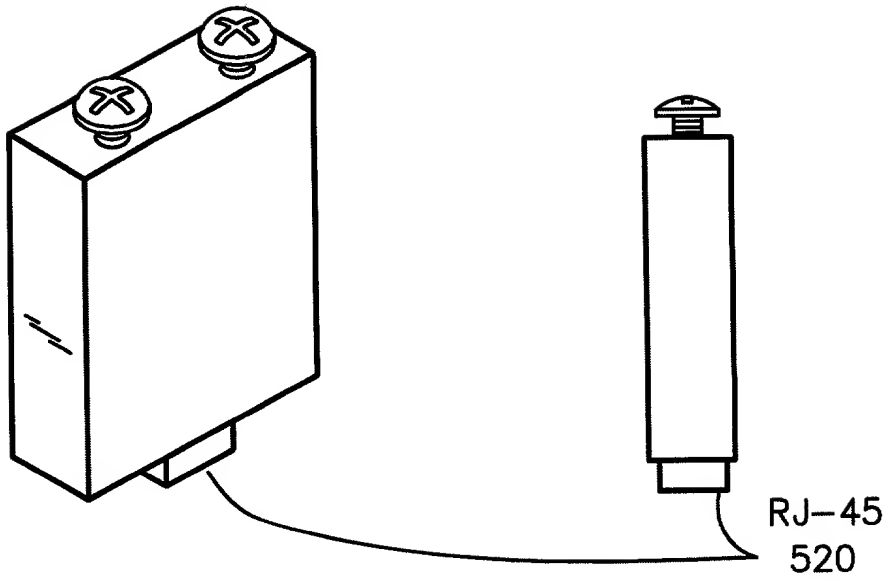
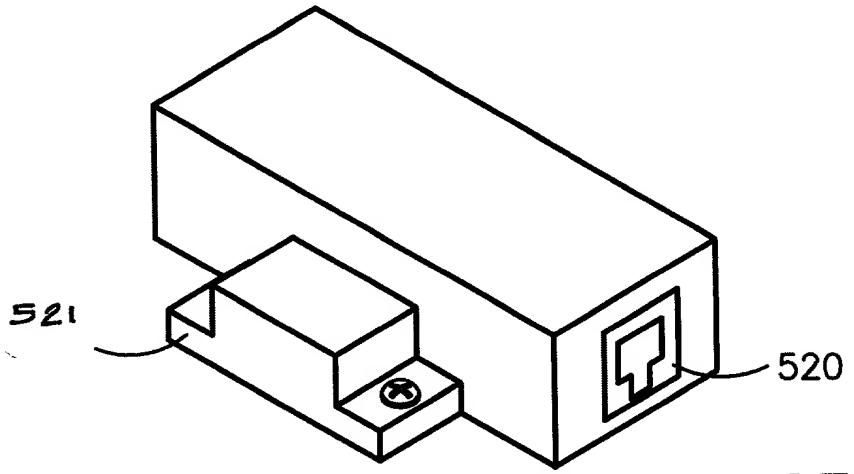

528
526
FIRE
540
528
526
RJ-45
520
PULL HANDLE
287
ACCESS POINT
500
380
DATA
WIRELESS INTERFACE
IP CONTROLLER
540
POWER SUPPLY
289
EXTERNAL POWER IN

FIG. 14A



EXTERNAL CONTACT INTERFACE



INTERNAL CONTACT INTERFACE

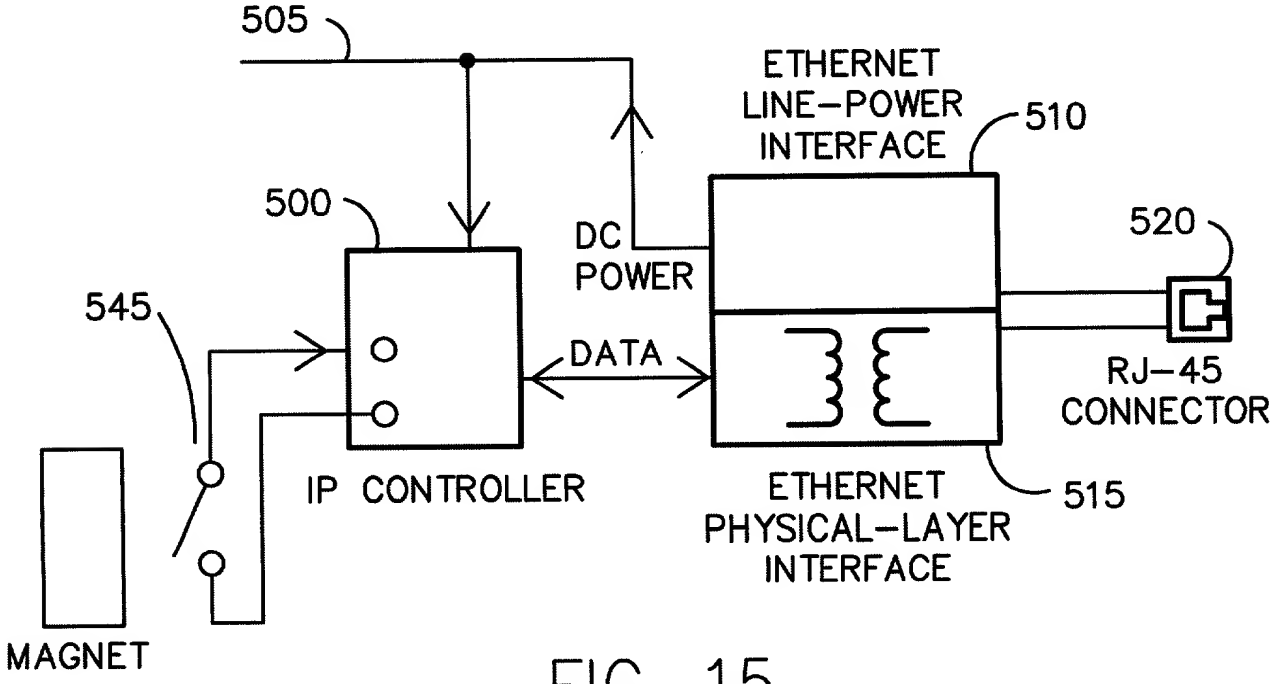
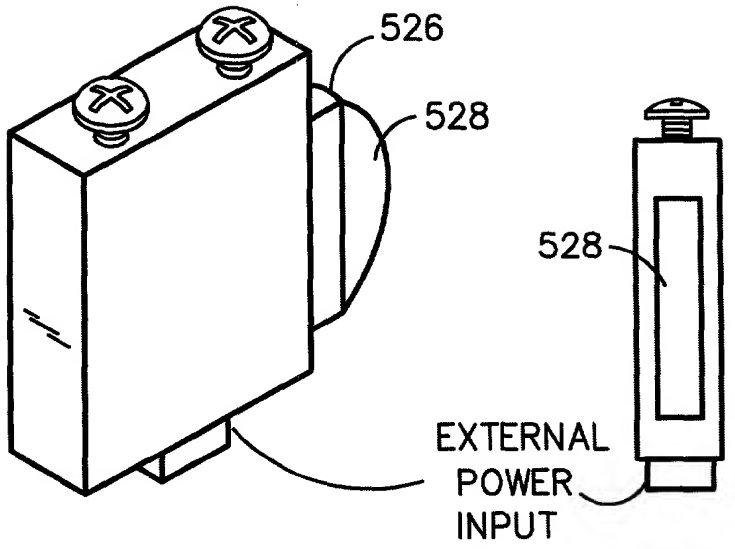
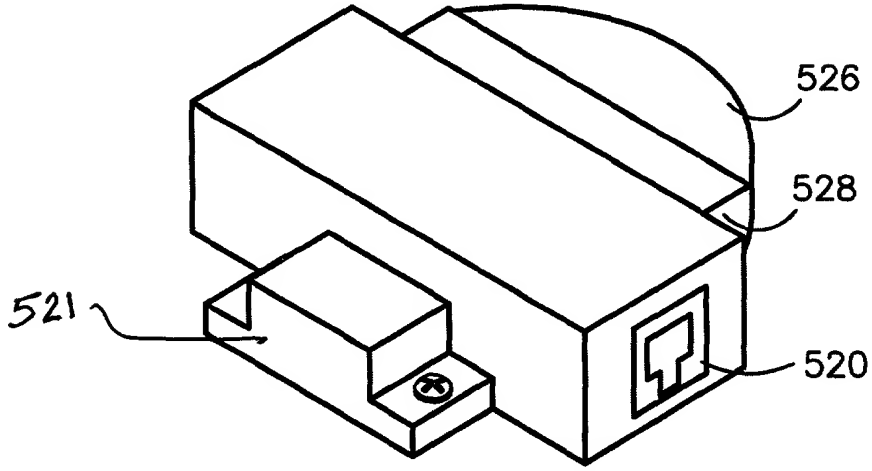


FIG. 15



EXTERNAL CONTACT INTERFACE



INTERNAL CONTACT INTERFACE

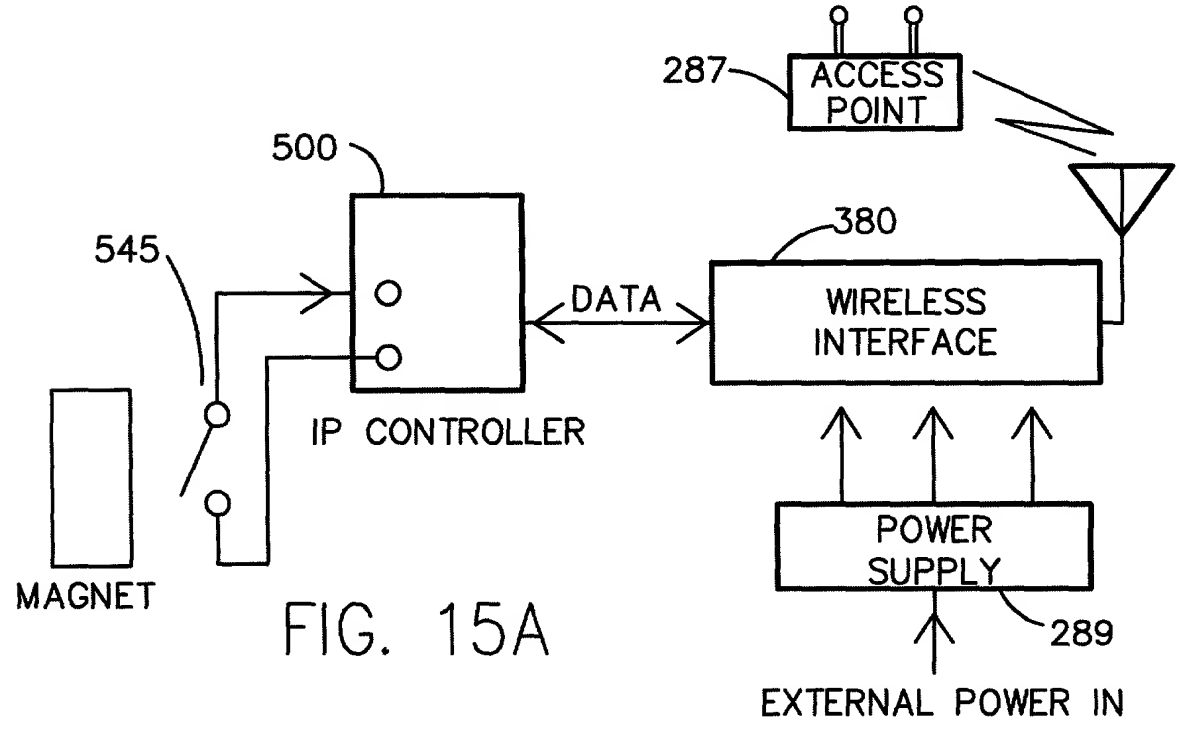
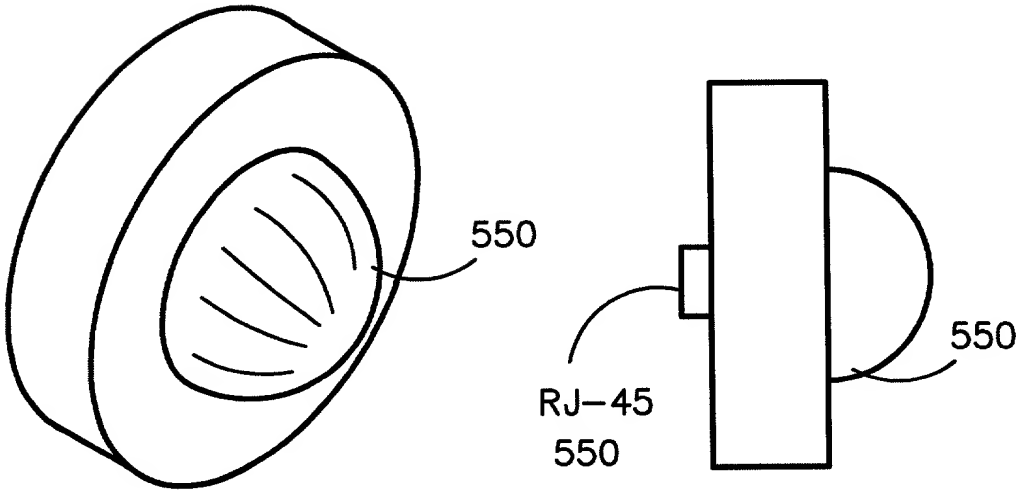


FIG. 15A



HEAT SENSOR

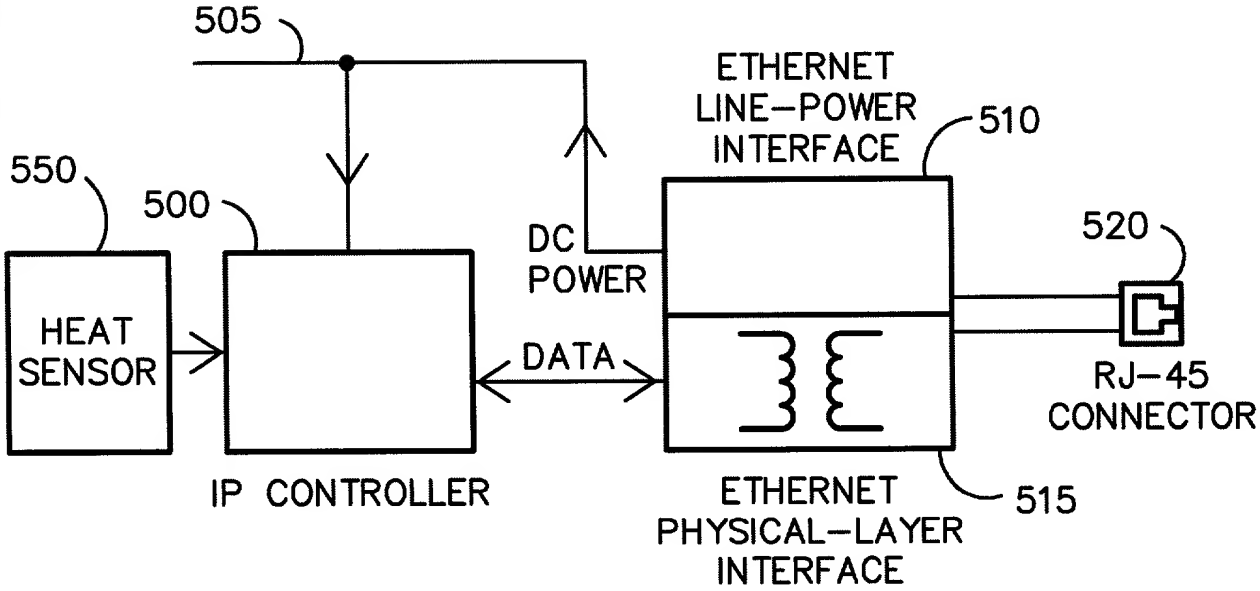
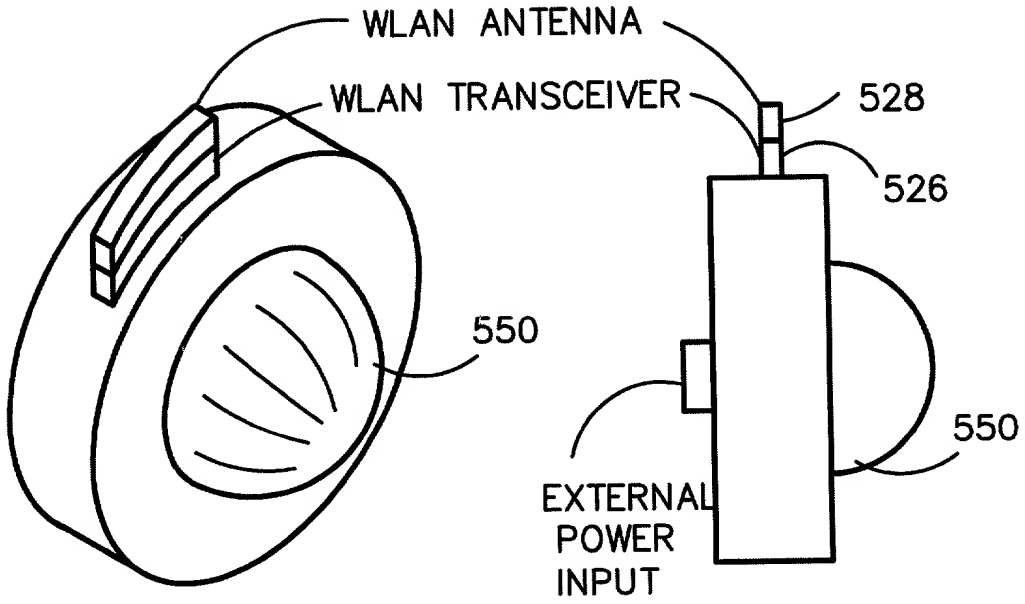


FIG. 16



HEAT SENSOR

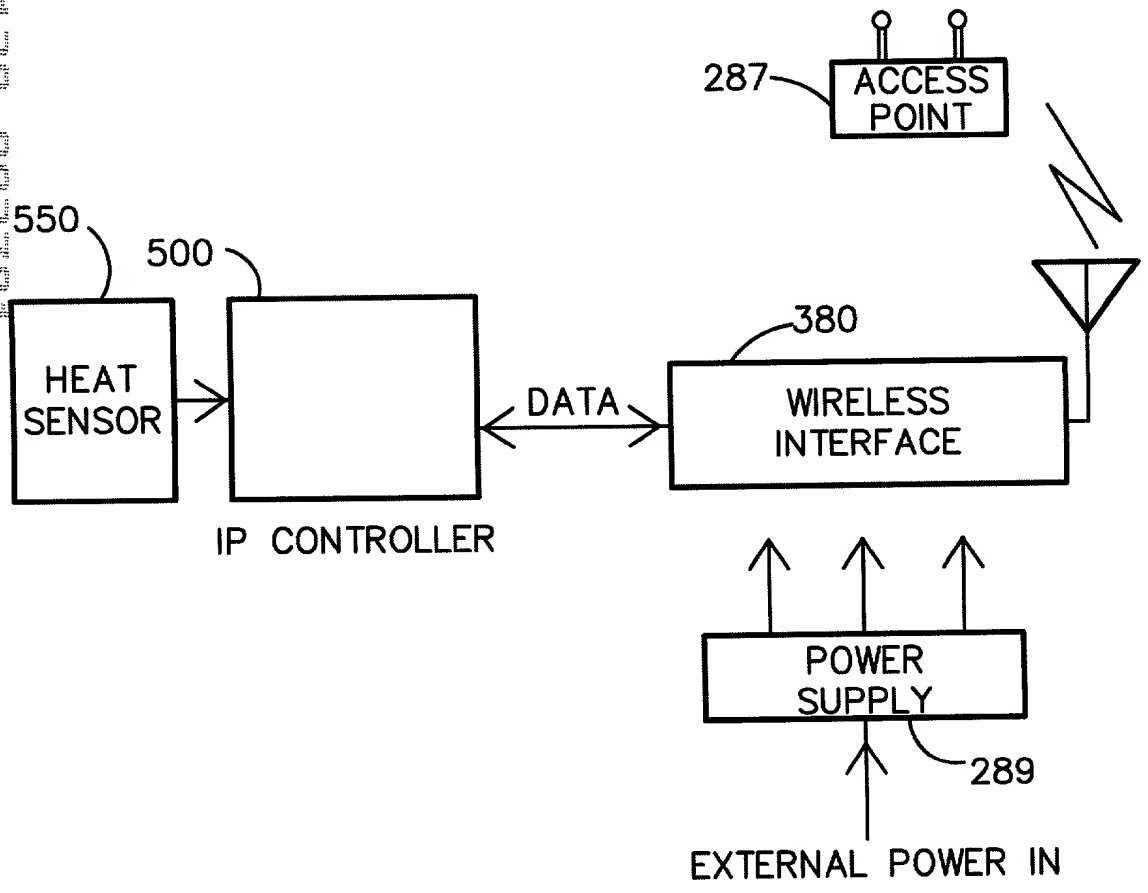
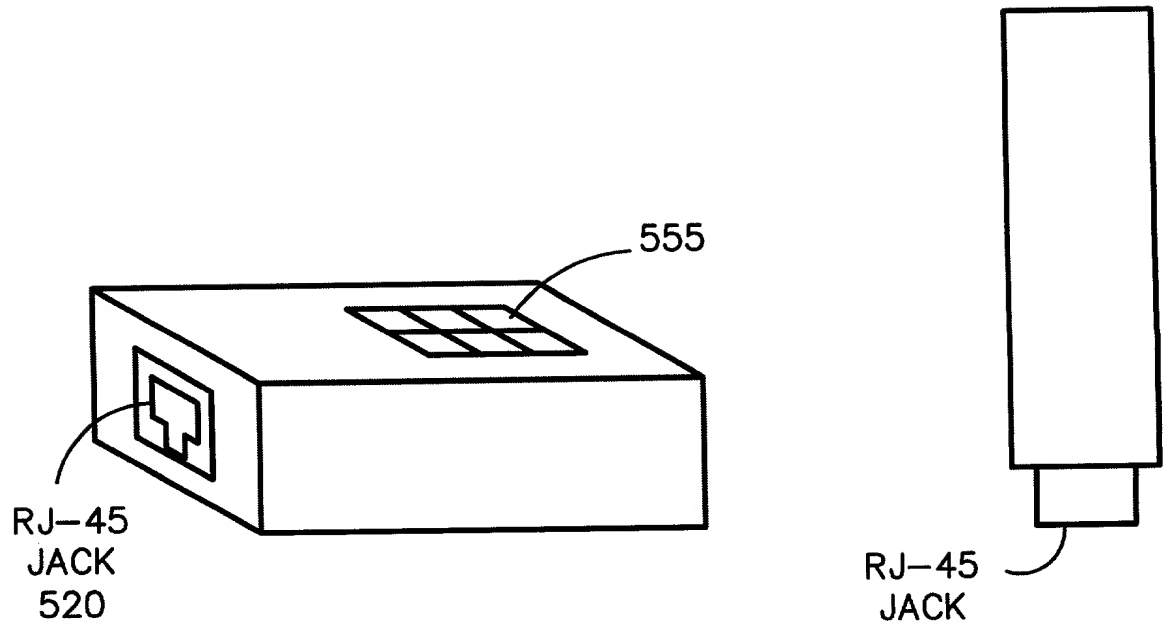


FIG. 16A



GLASS BREAK

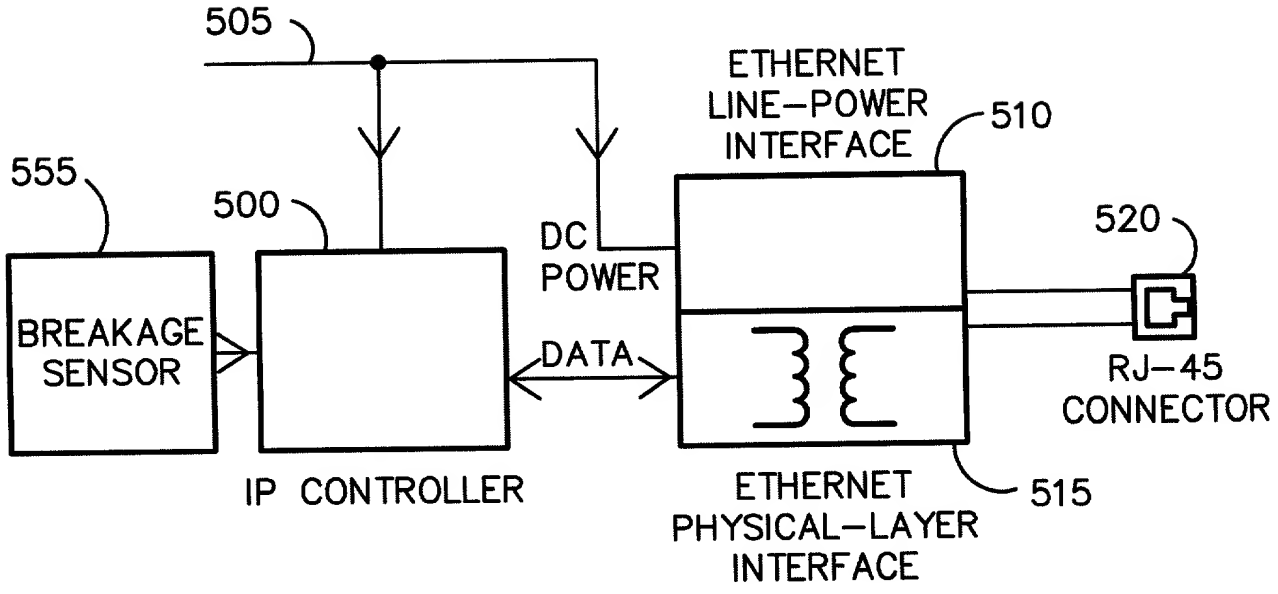
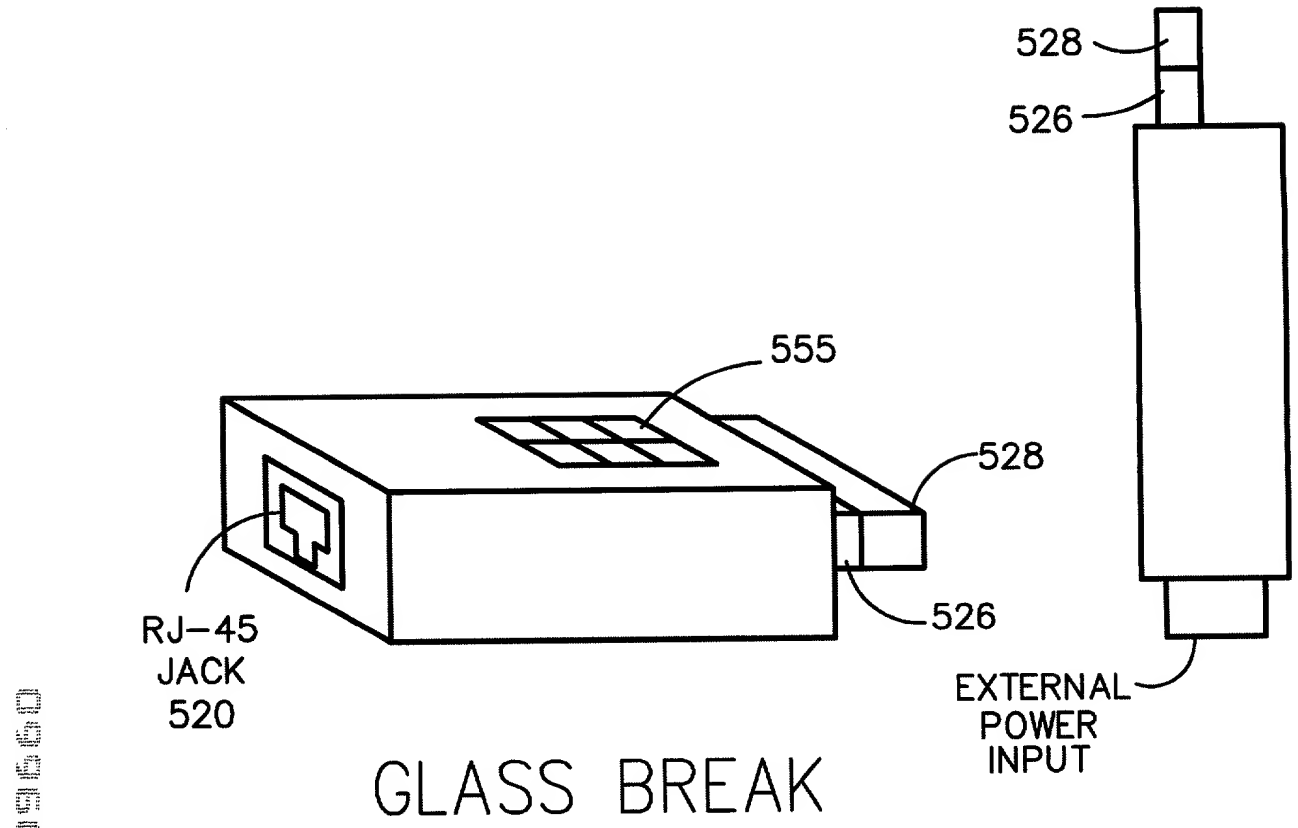


FIG. 17



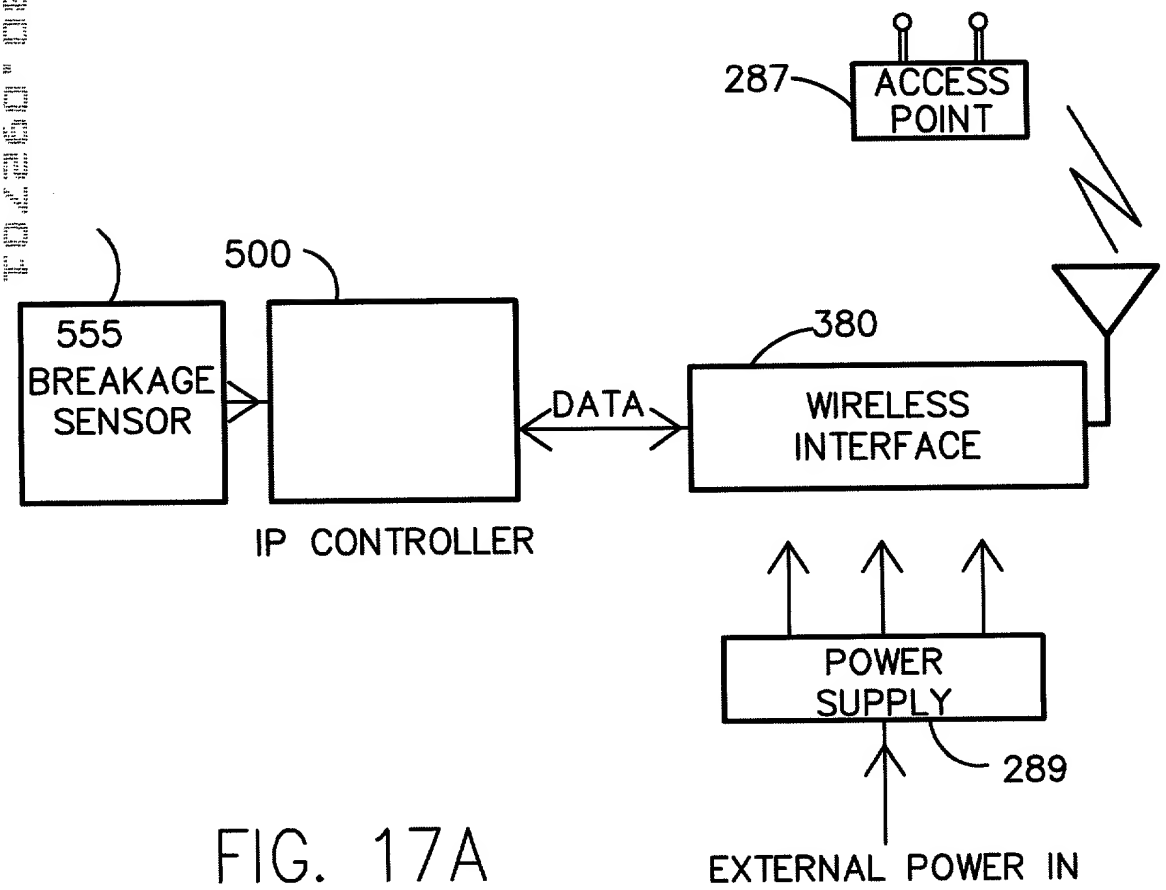
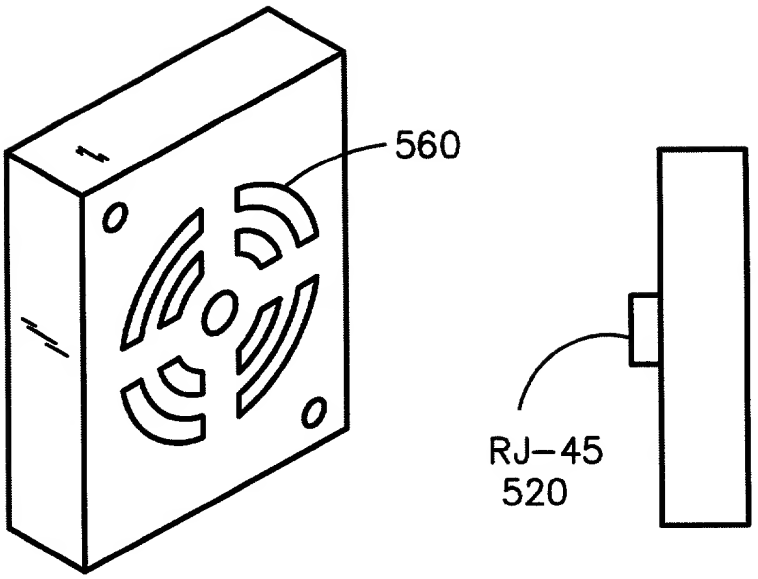


FIG. 17A


560
RJ-45
520

SIREN

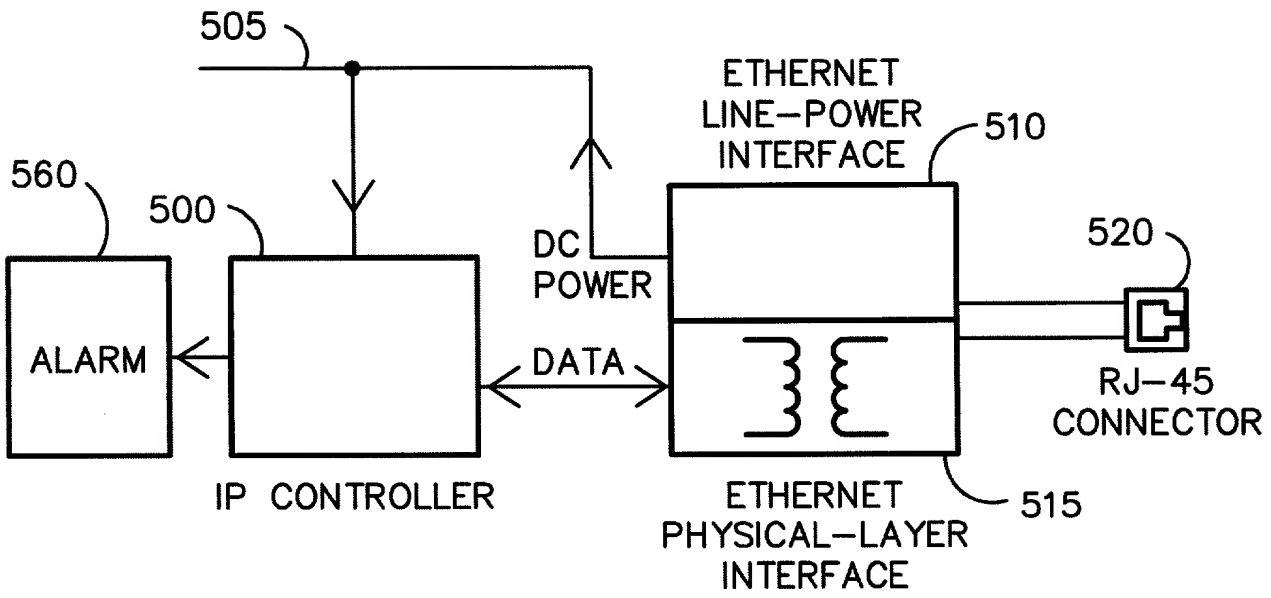
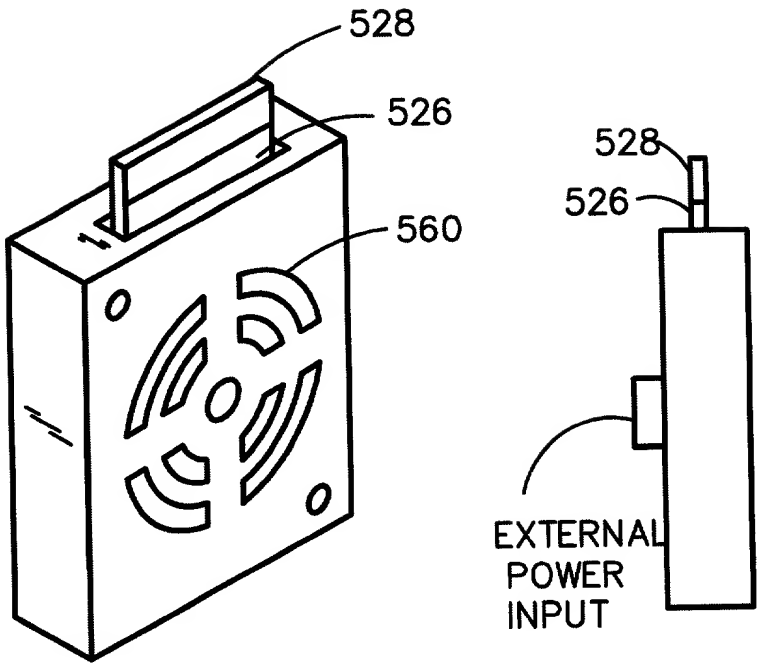

505
ETHERNET
LINE-POWER
INTERFACE
510
560
500
520
DC
POWER
ALARM
DATA
RJ-45
CONNECTOR
IP CONTROLLER
ETHERNET
PHYSICAL-LAYER
INTERFACE
515

FIG. 18



SIREN

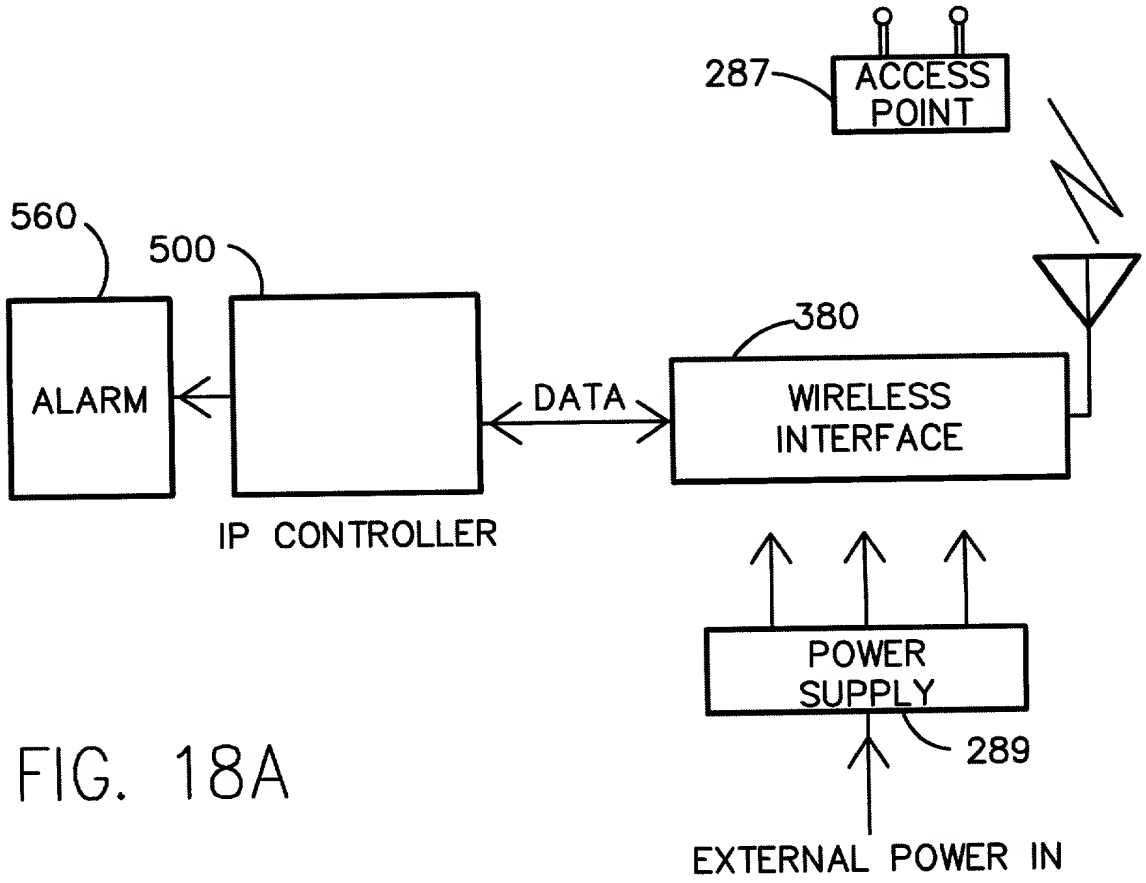
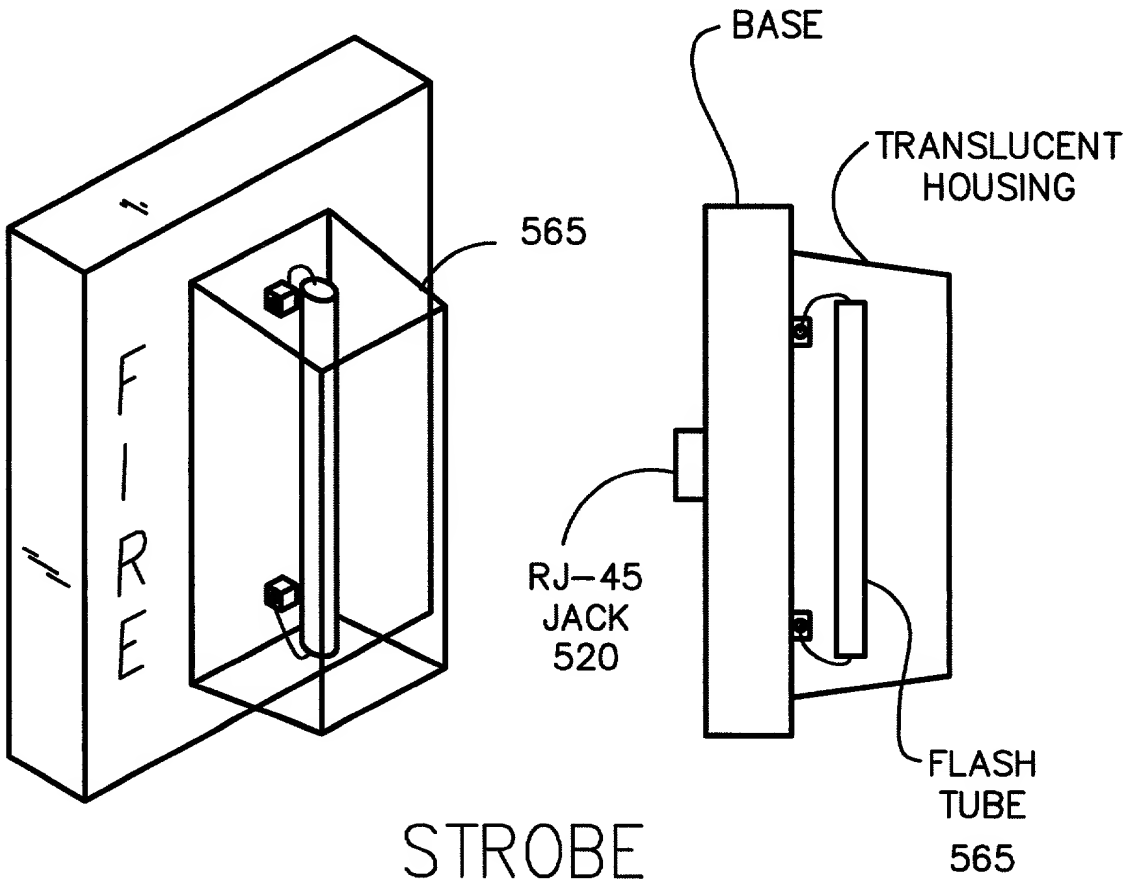


FIG. 18A



STROBE

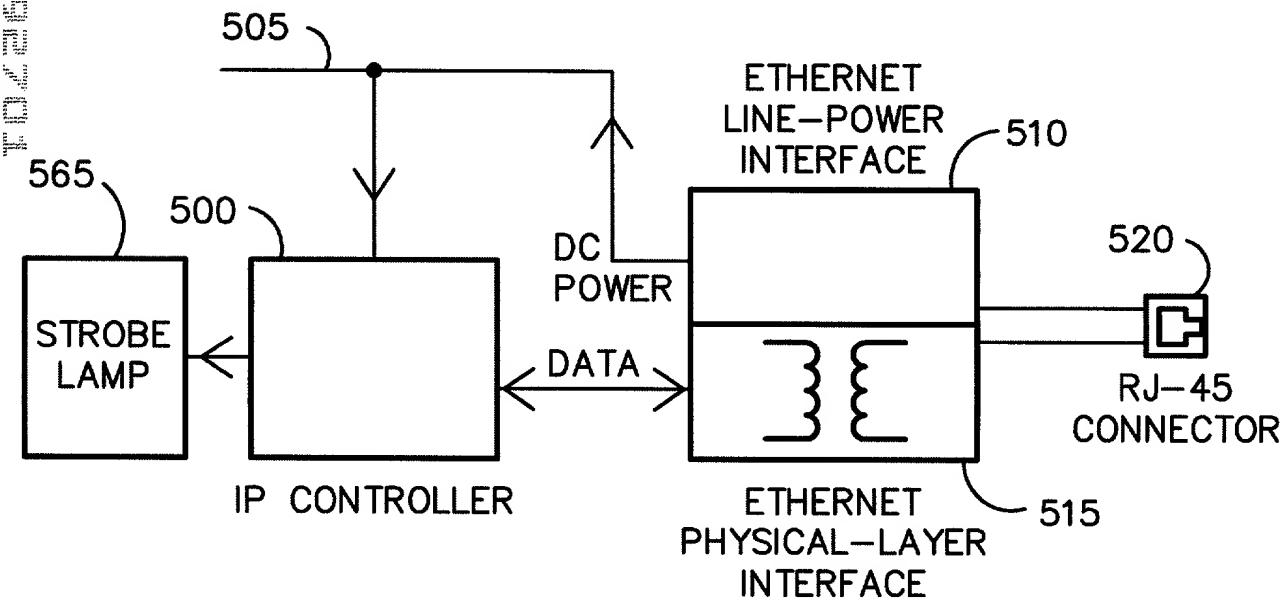
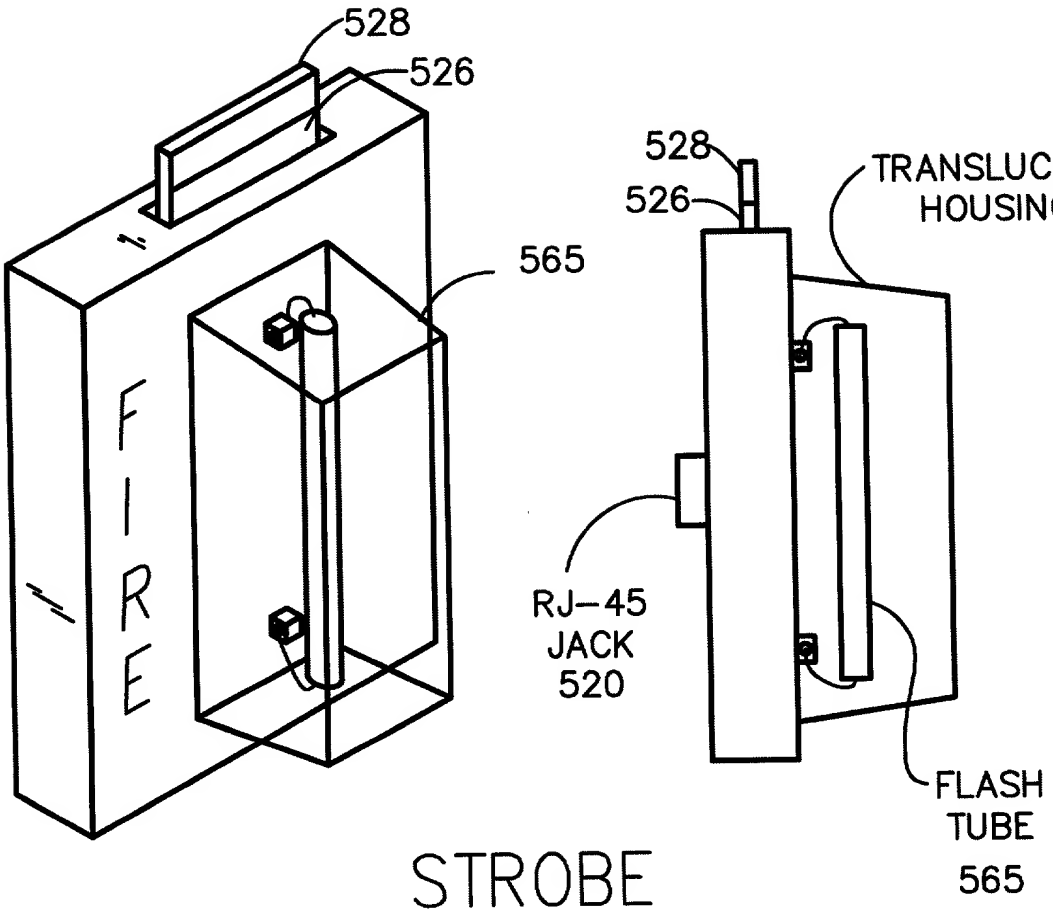


FIG. 19



STROBE

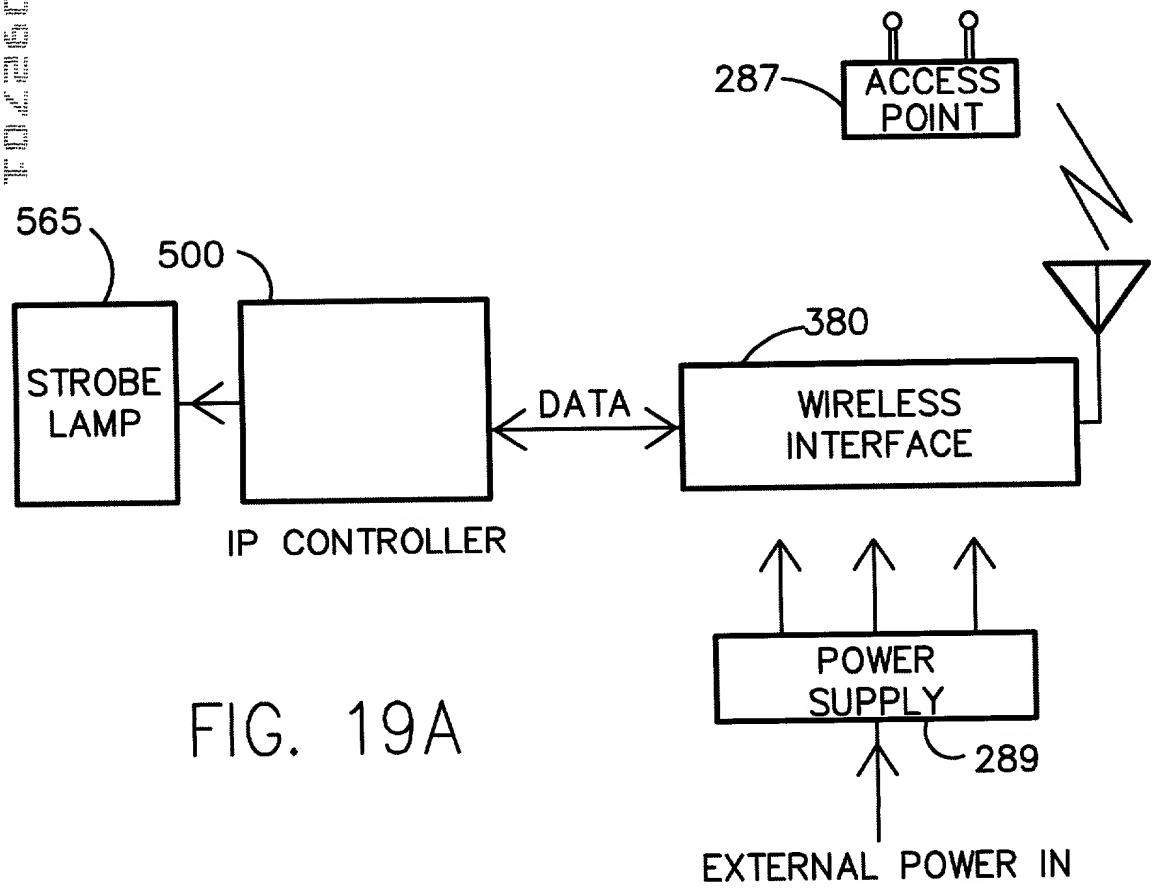
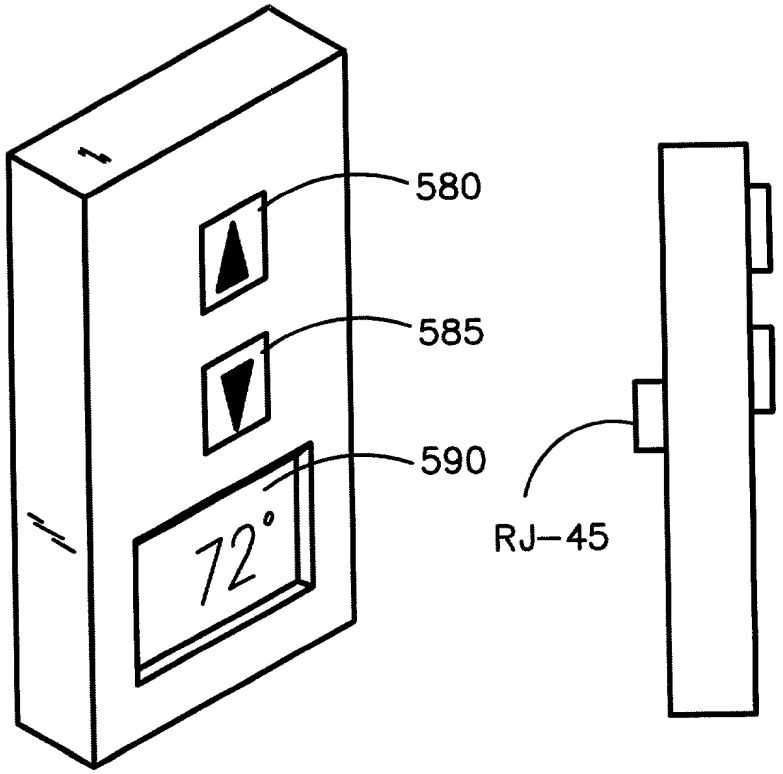


FIG. 19A



THERMOSTAT AND/OR HUMIDISTAT

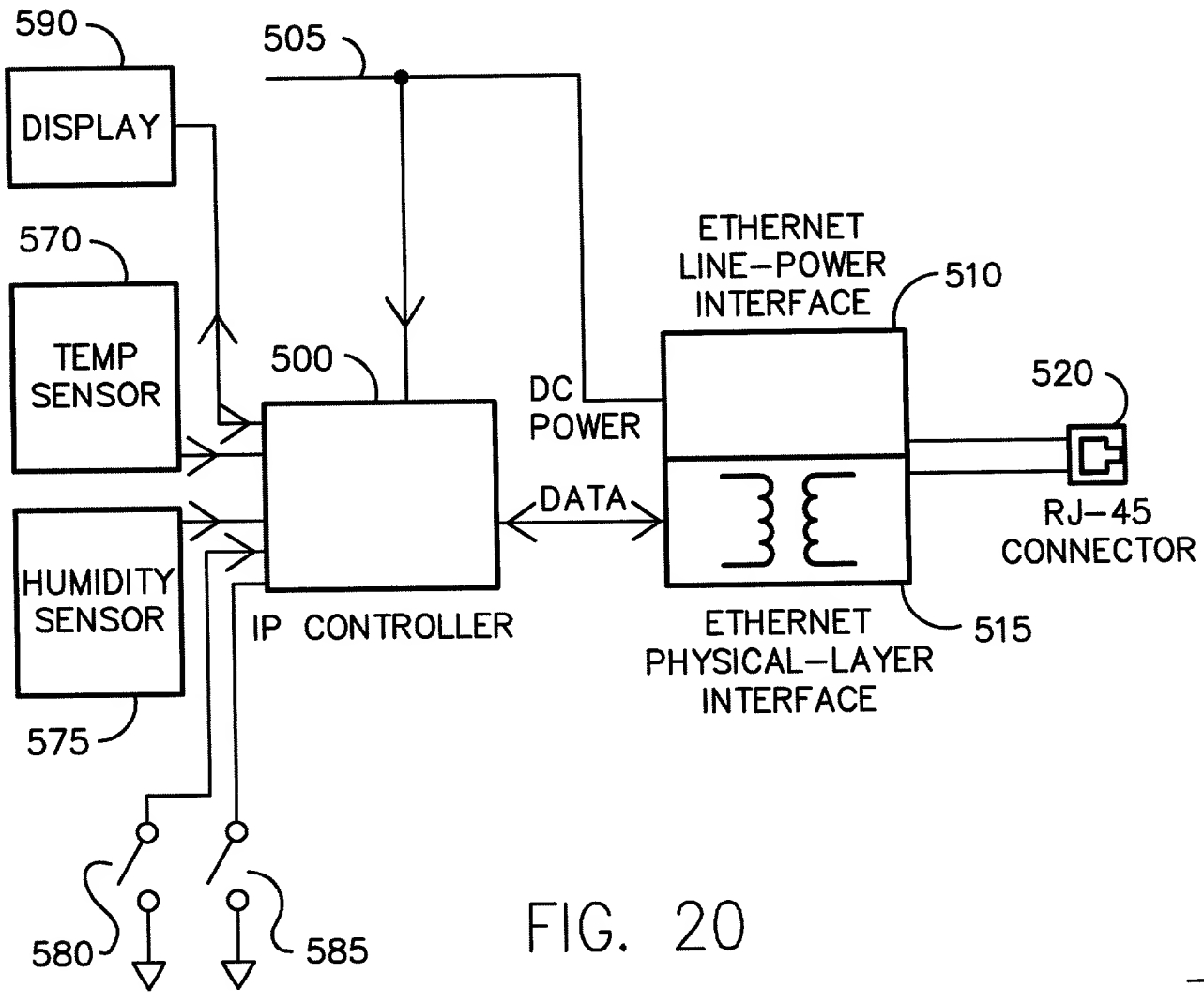
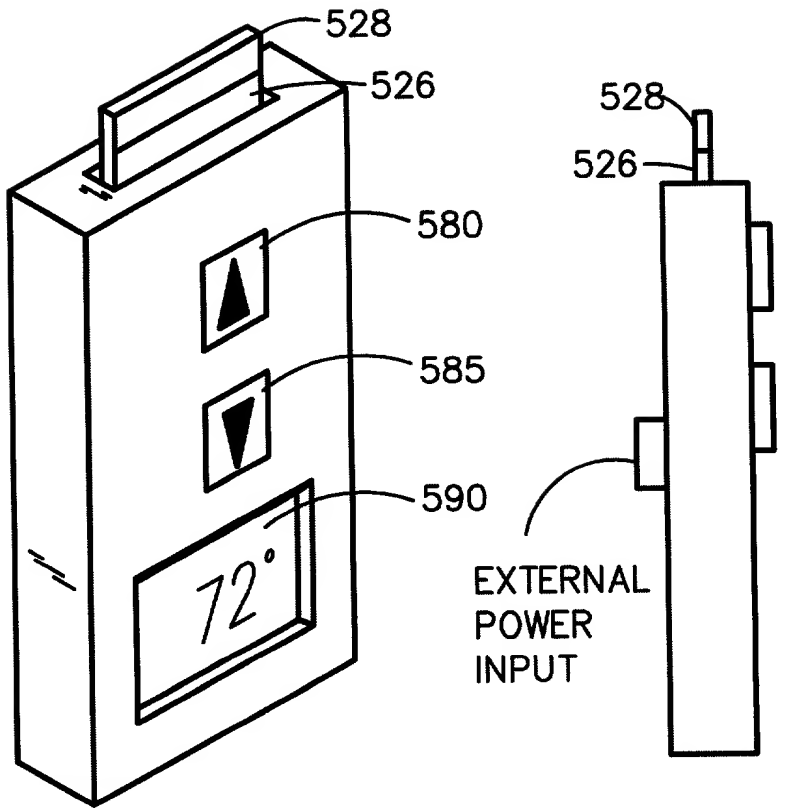


FIG. 20



THERMOSTAT AND/OR HUMIDISTAT

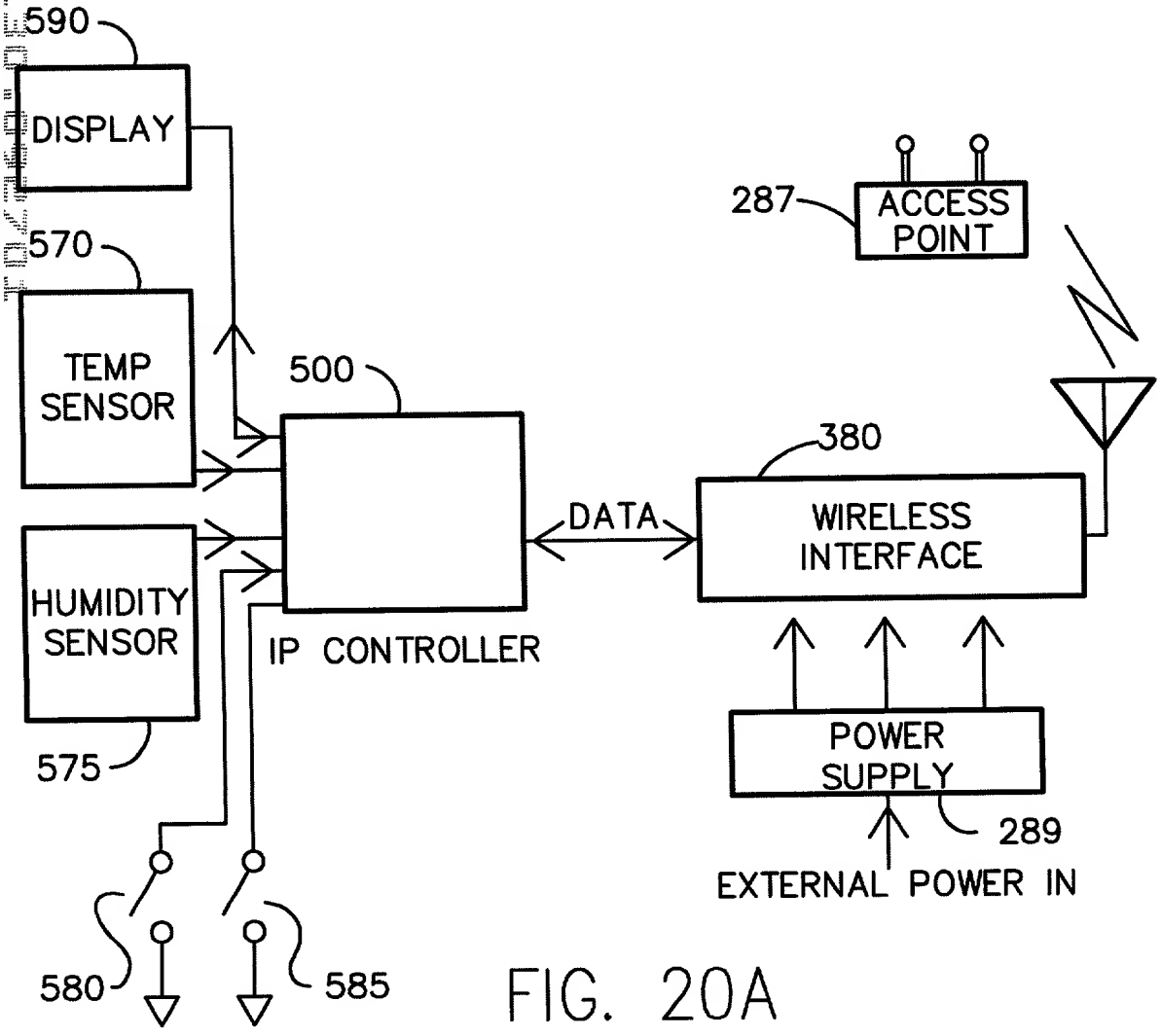
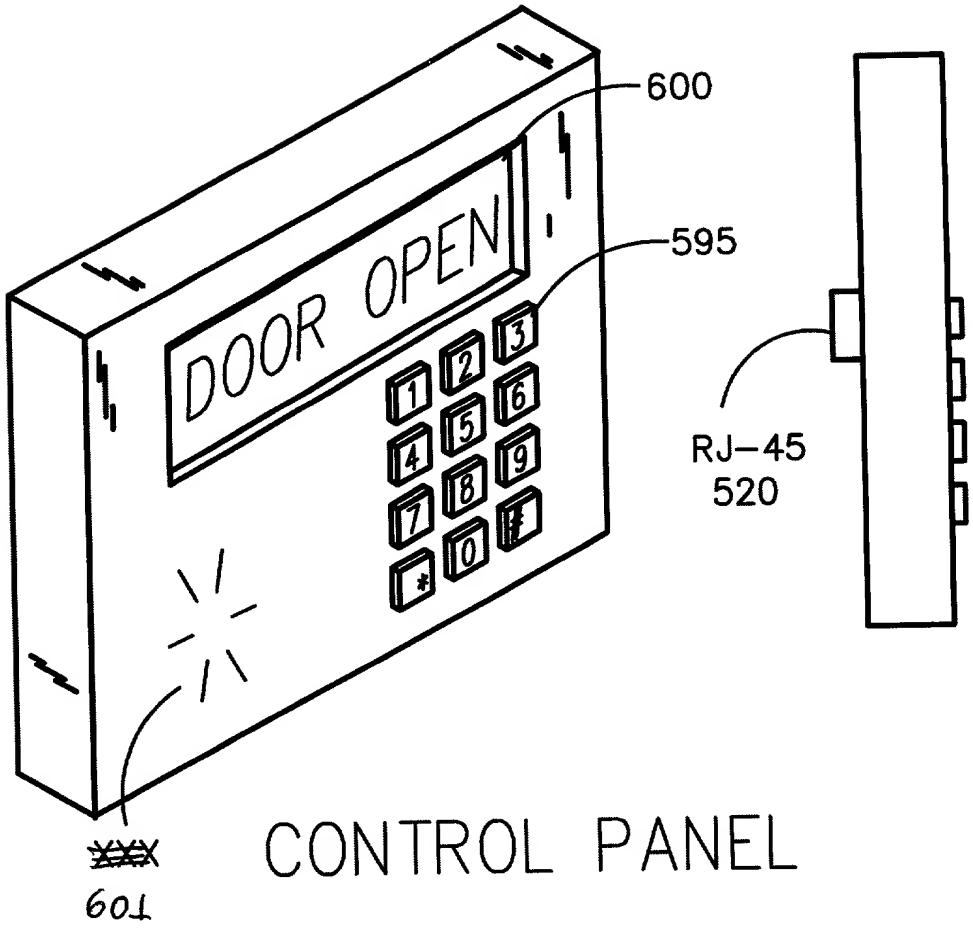


FIG. 20A



CONTROL PANEL

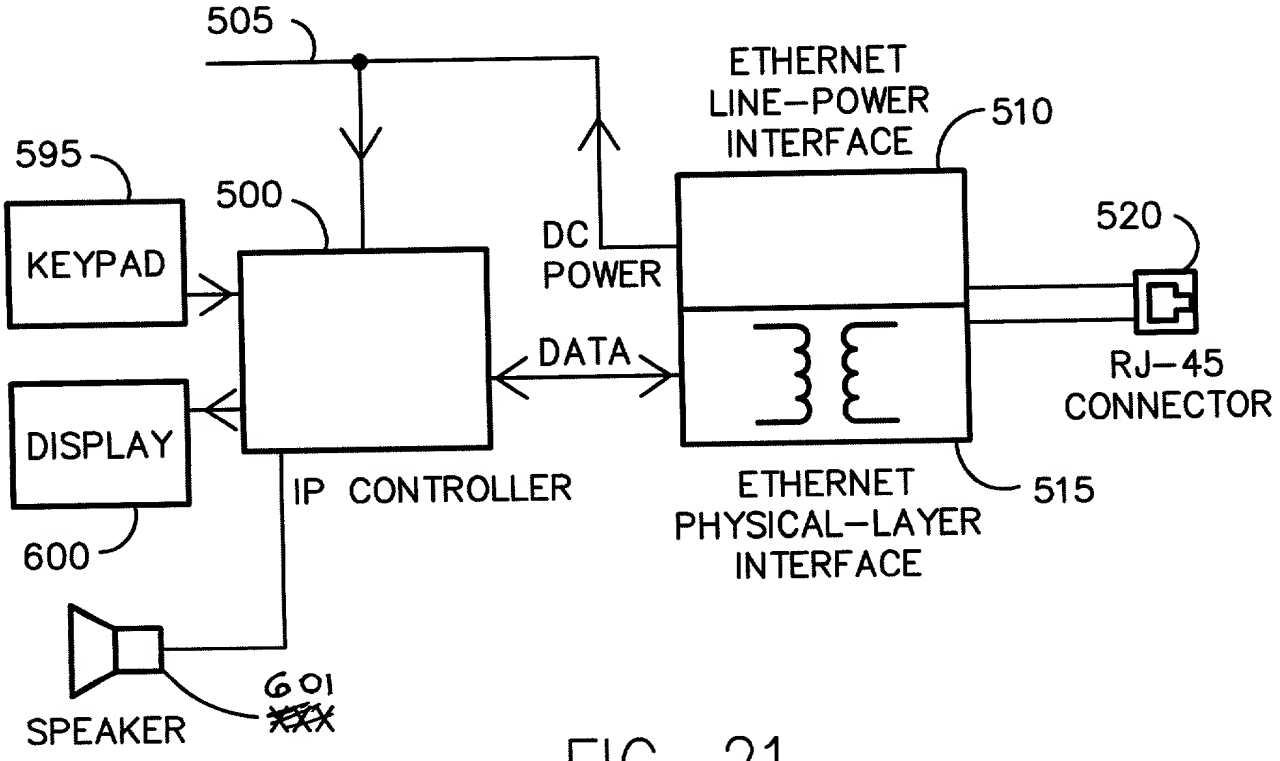
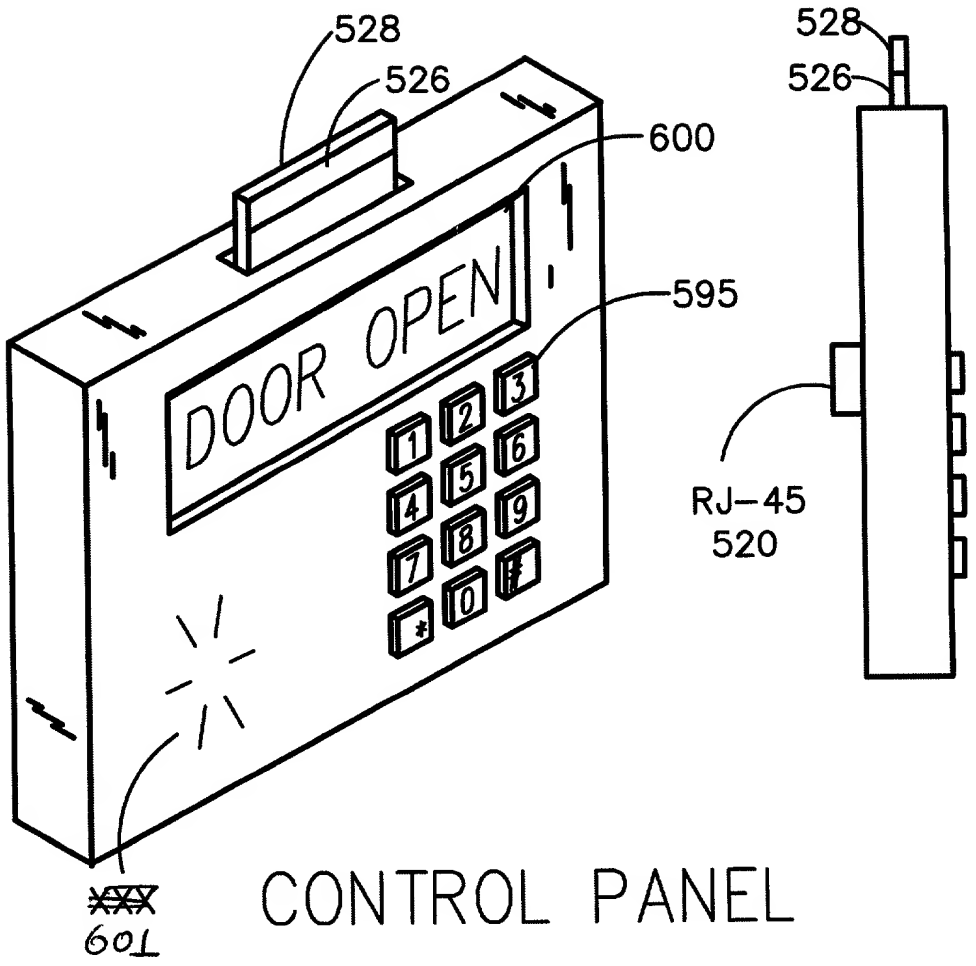


FIG. 21


528
526
600
595
DOOR OPEN
528
526
RJ-45
520
601
CONTROL PANEL

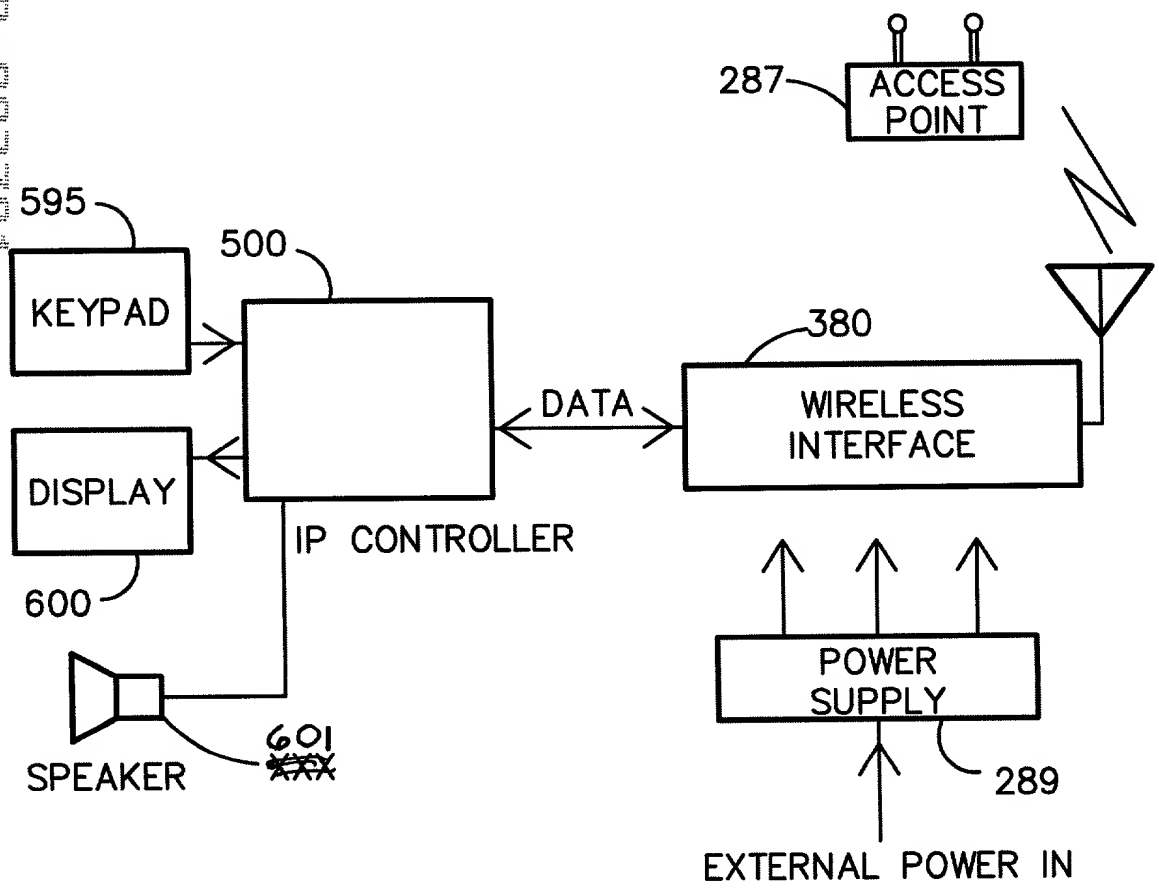
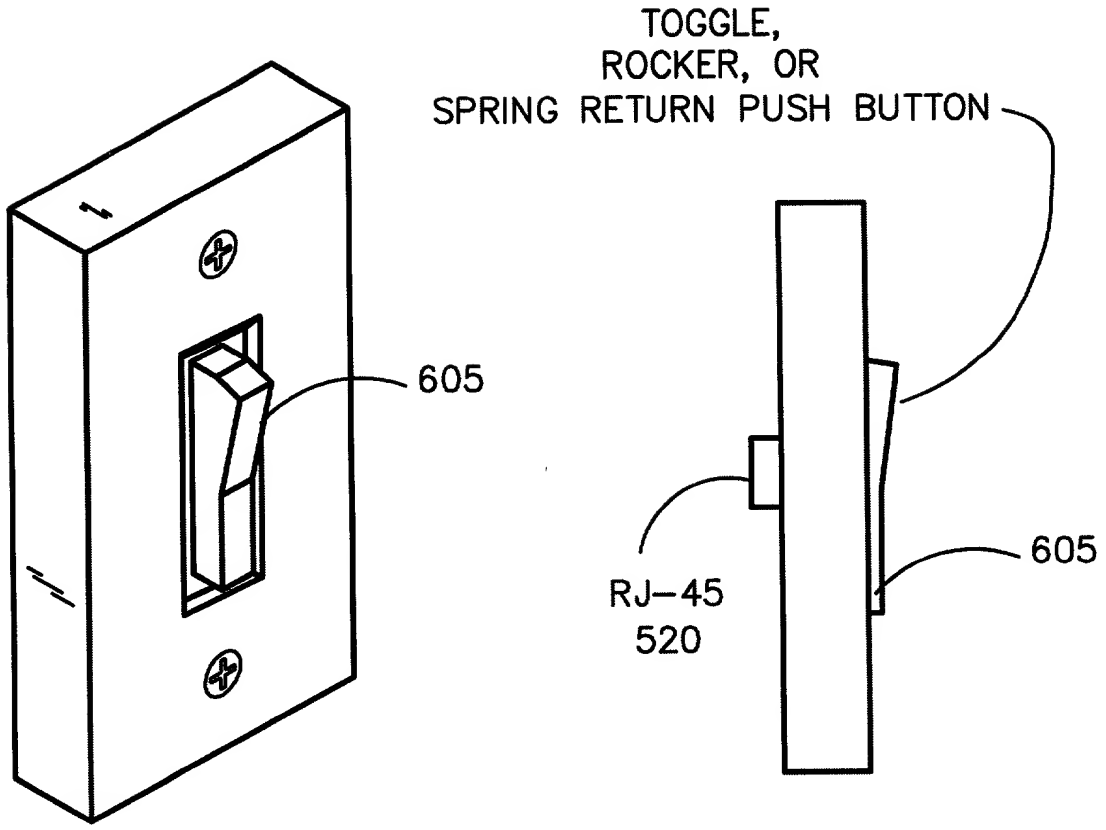

287
ACCESS POINT
595
500
KEYPAD
380
DATA
WIRELESS INTERFACE
DISPLAY
IP CONTROLLER
600
POWER SUPPLY
601
SPEAKER
289
EXTERNAL POWER IN

FIG. 21A



CONTROL SWITCH

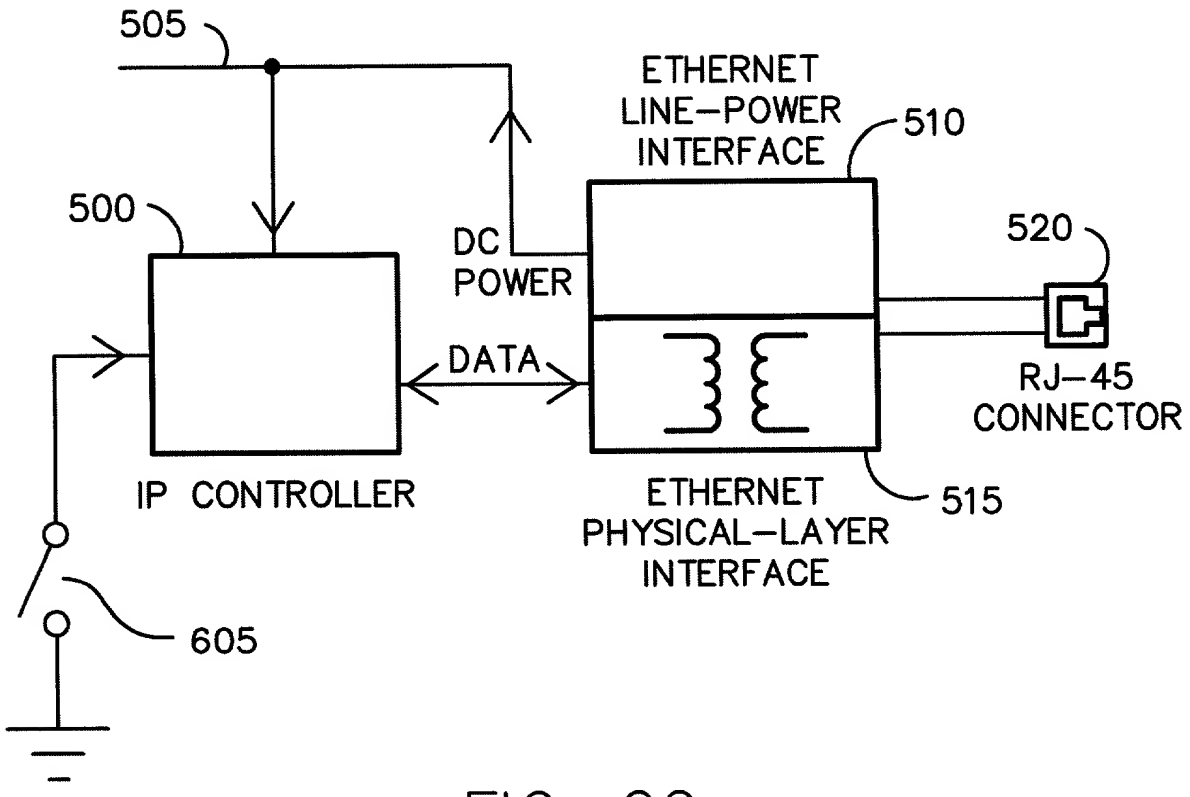
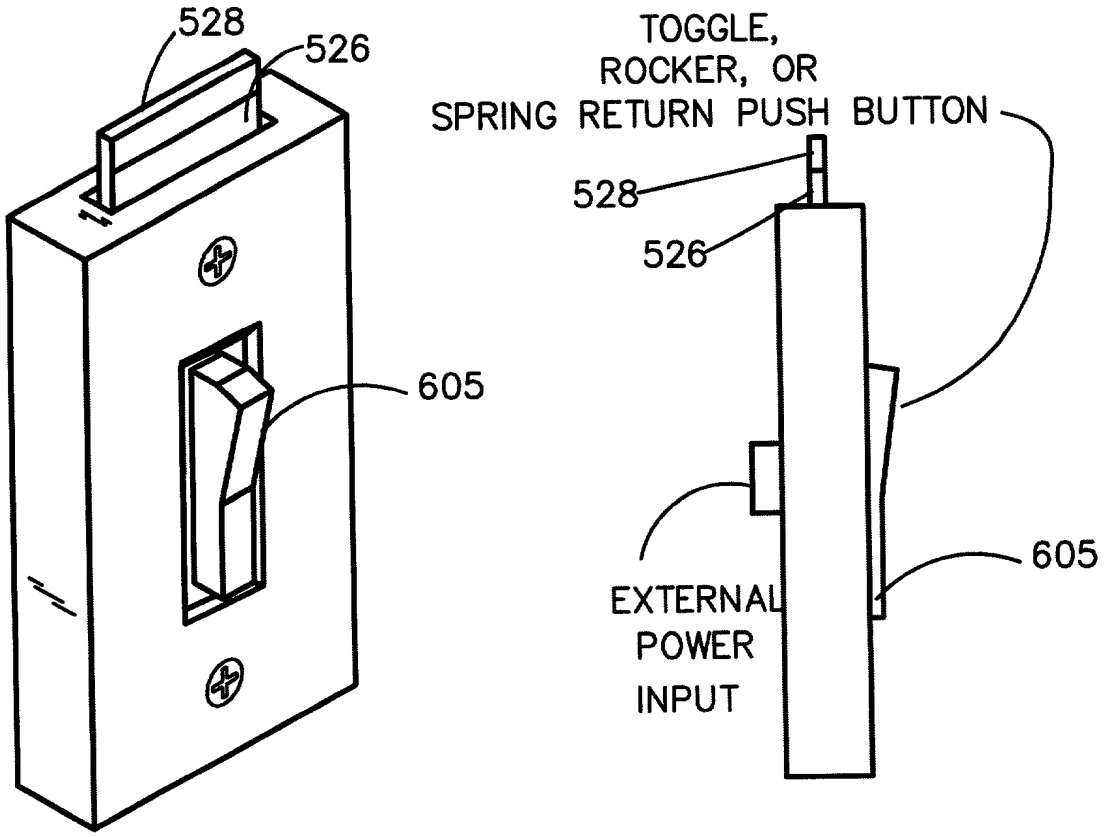


FIG. 22



CONTROL SWITCH

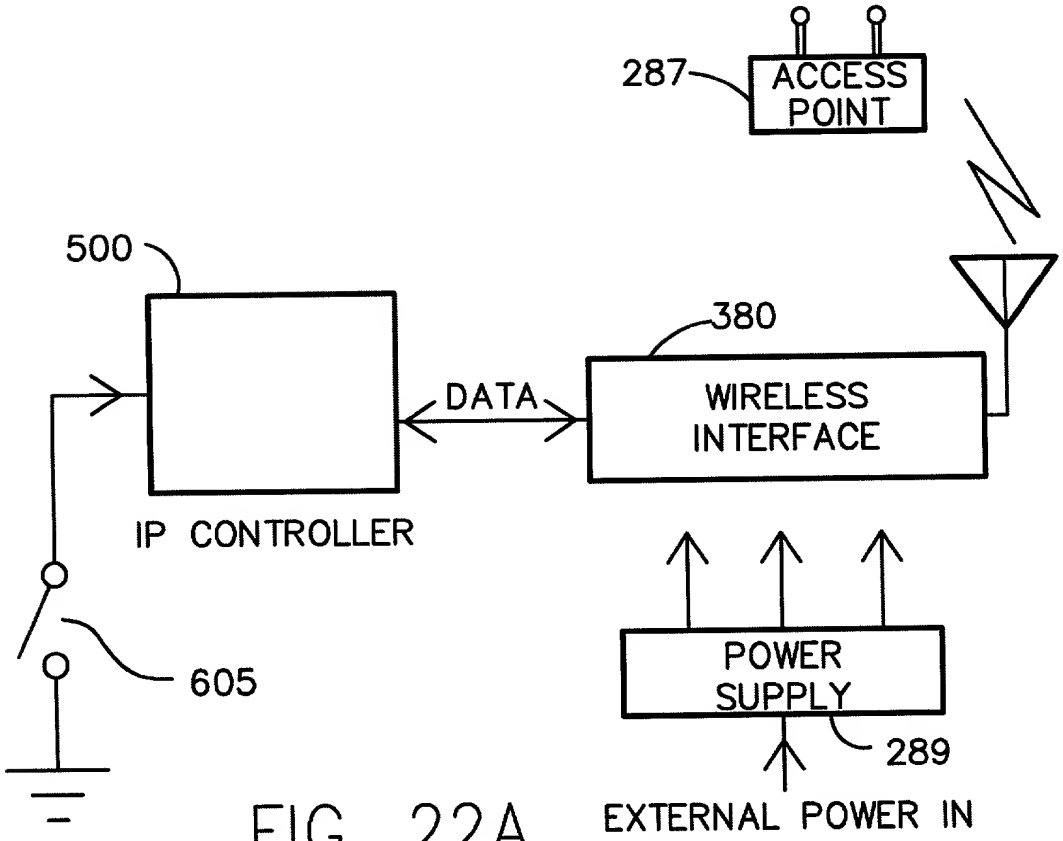
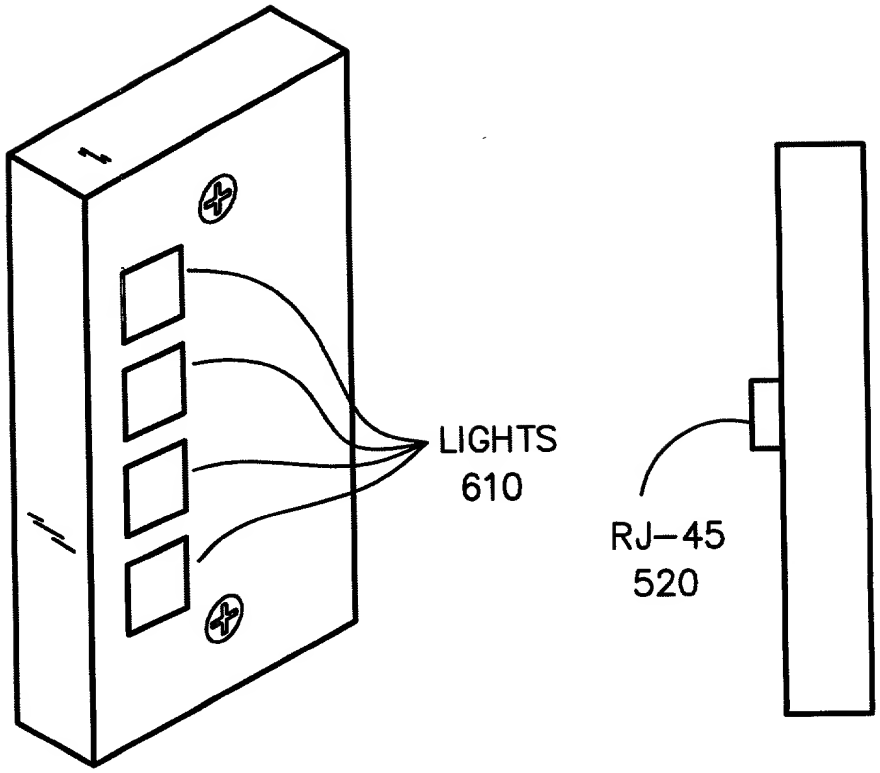


FIG. 22A



INDICATOR LIGHT

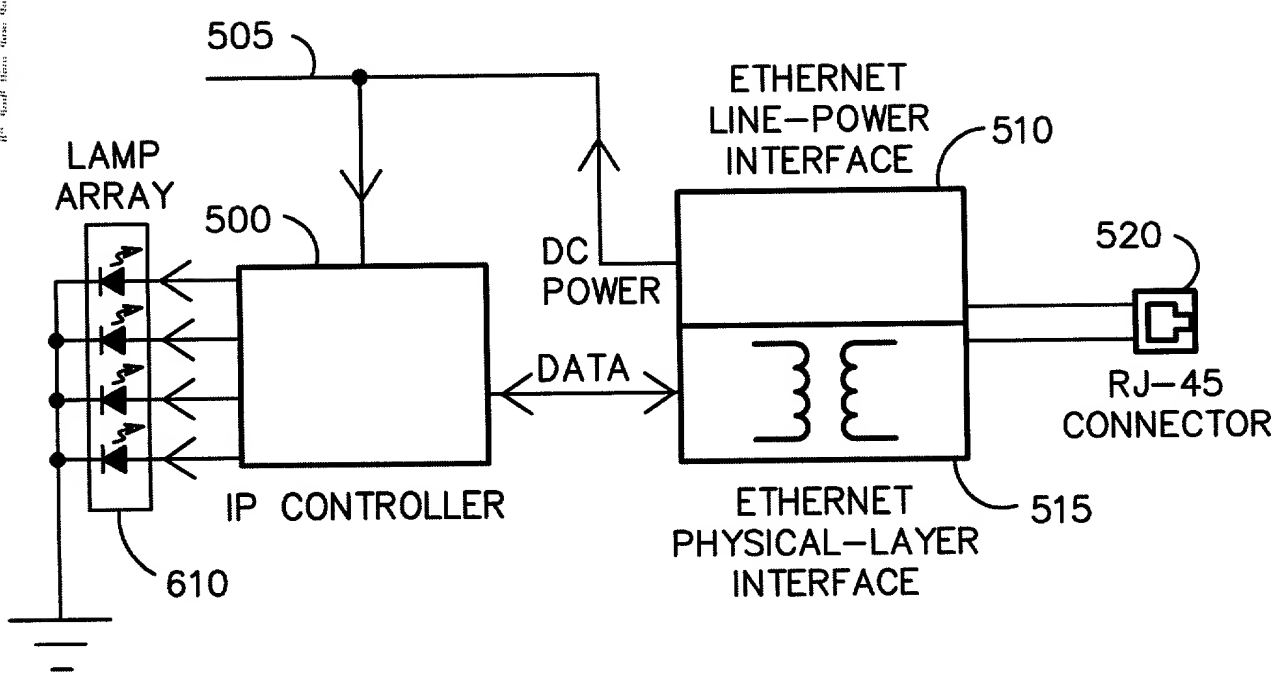
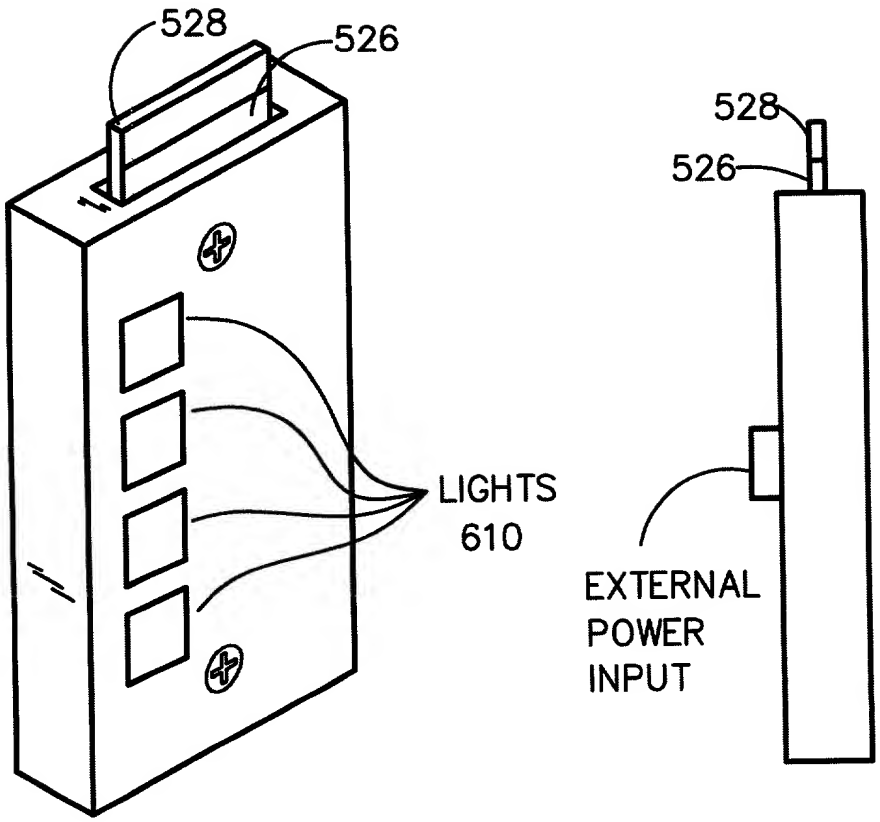


FIG. 23



INDICATOR LIGHT

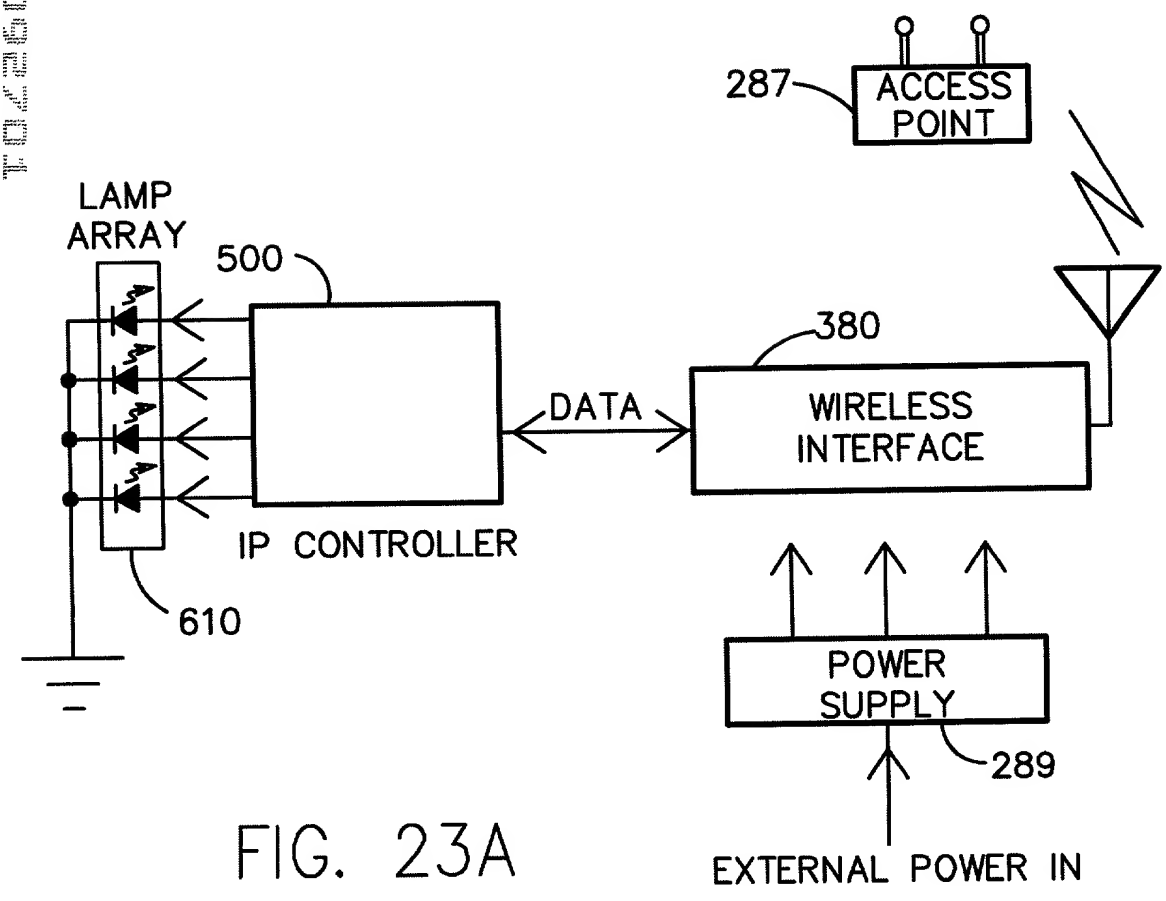
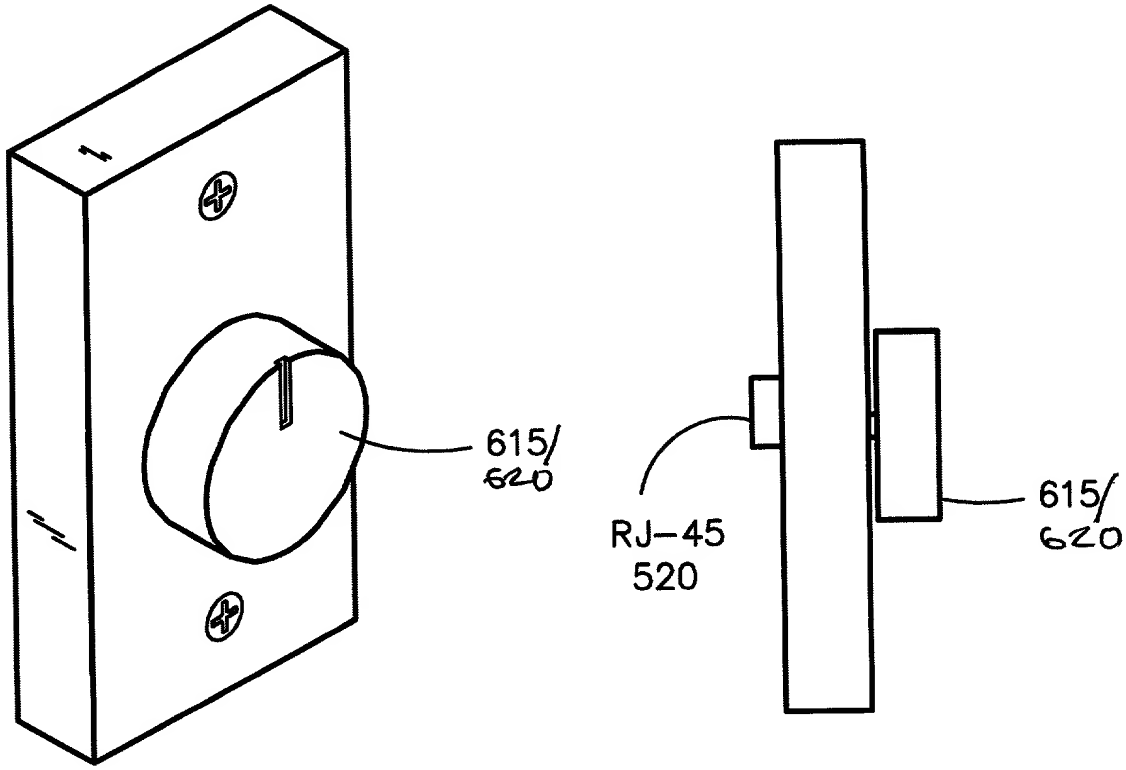


FIG. 23A



ANALOG CONTROL

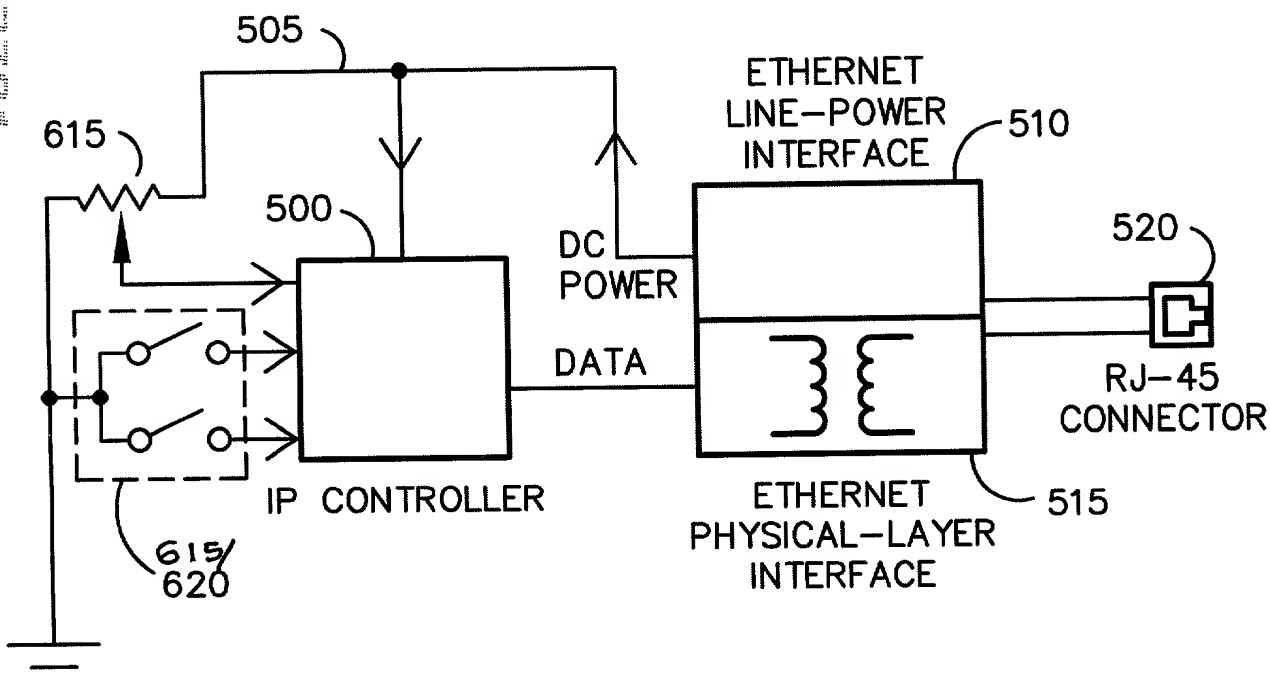
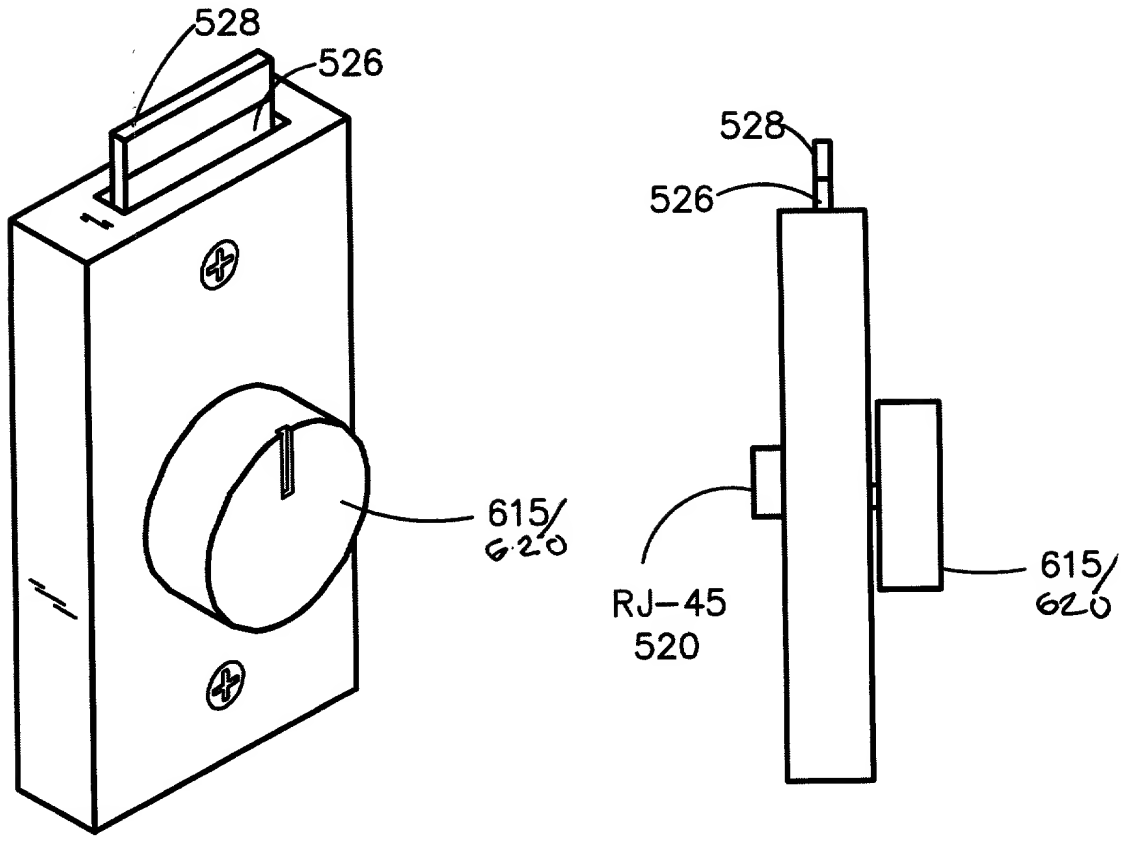


FIG. 24



ANALOG CONTROL

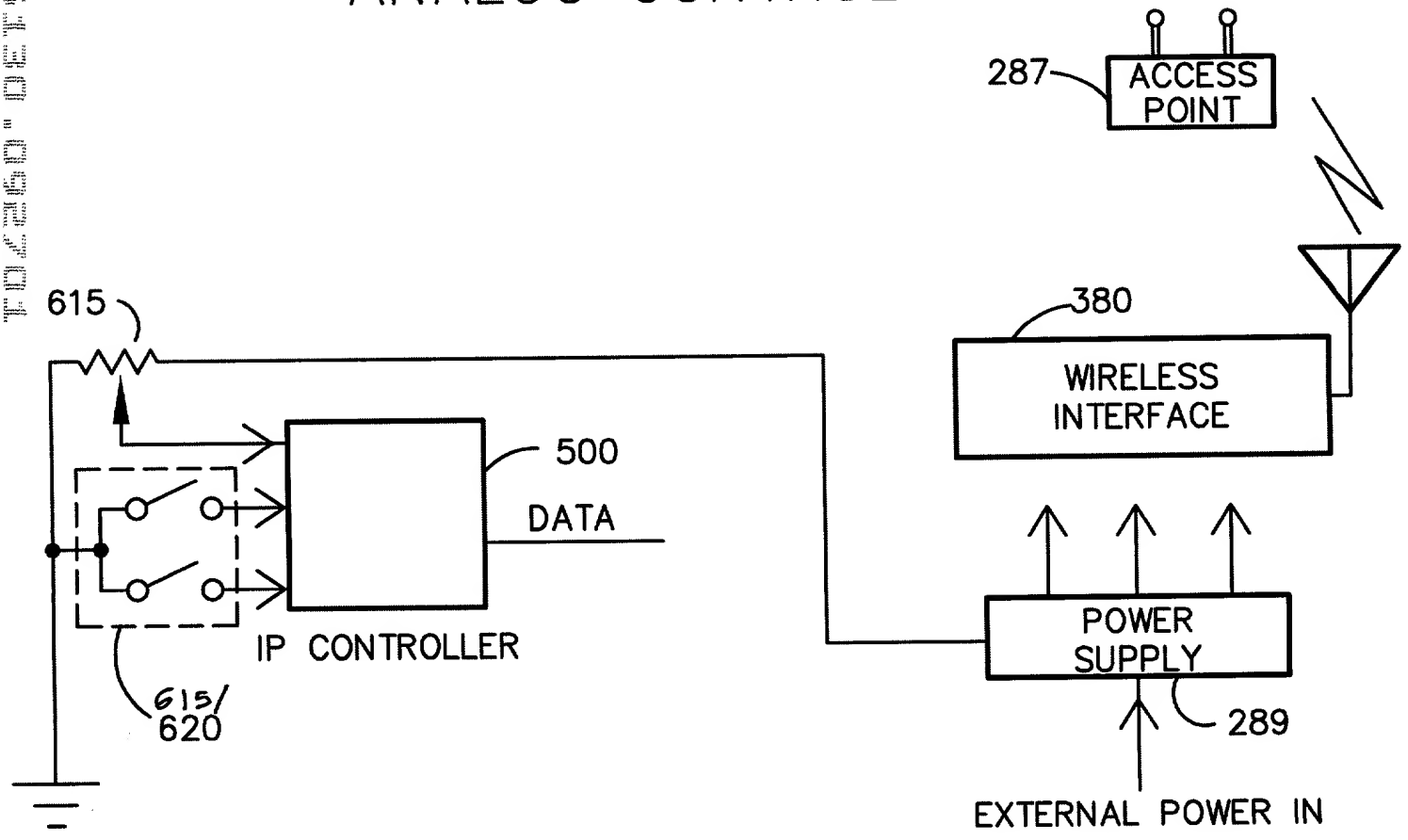
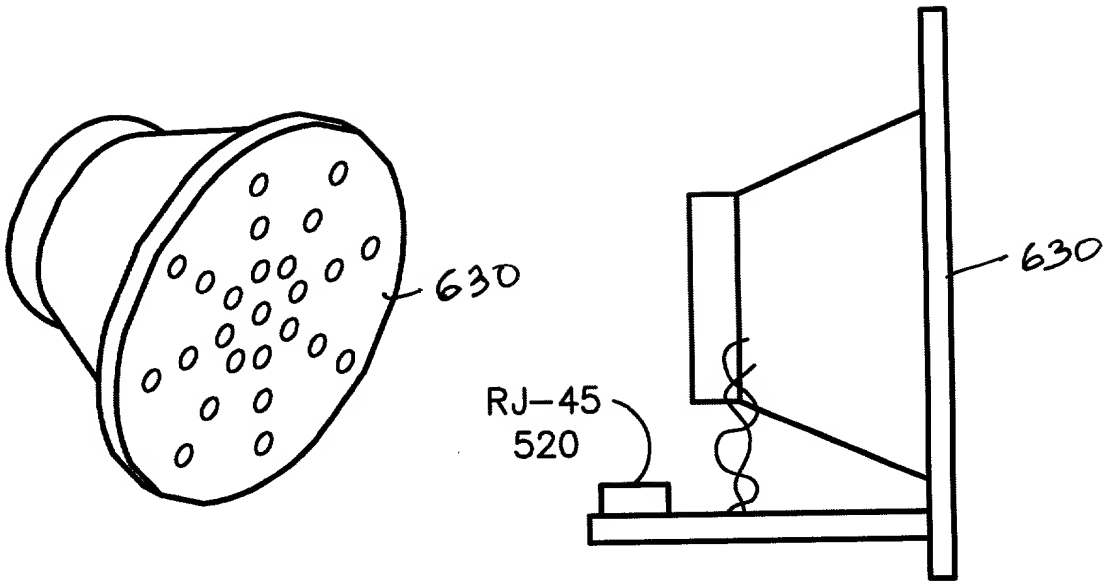


FIG. 24A



LOUDSPEAKER
WITH AMPLIFIER

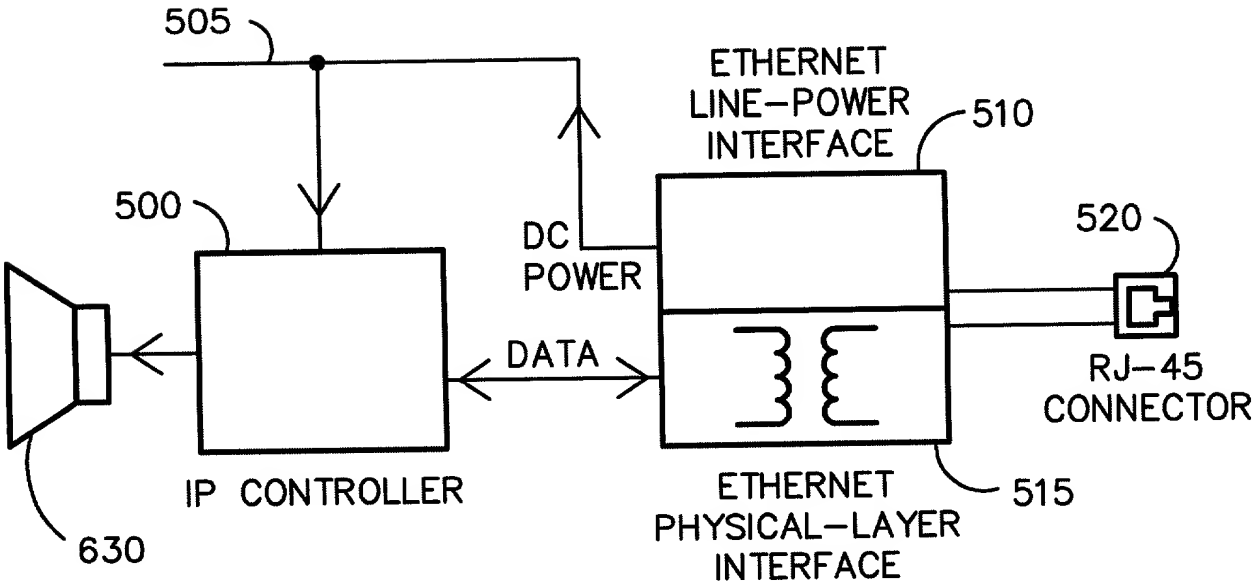
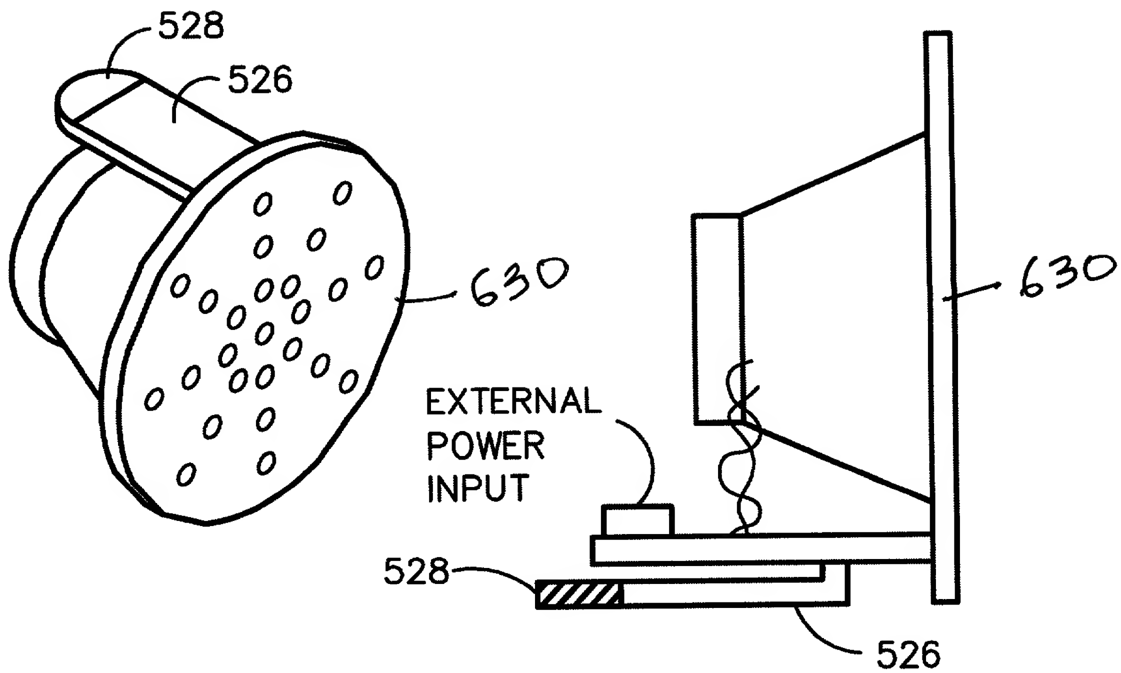


FIG. 25



LOUDSPEAKER
WITH AMPLIFIER

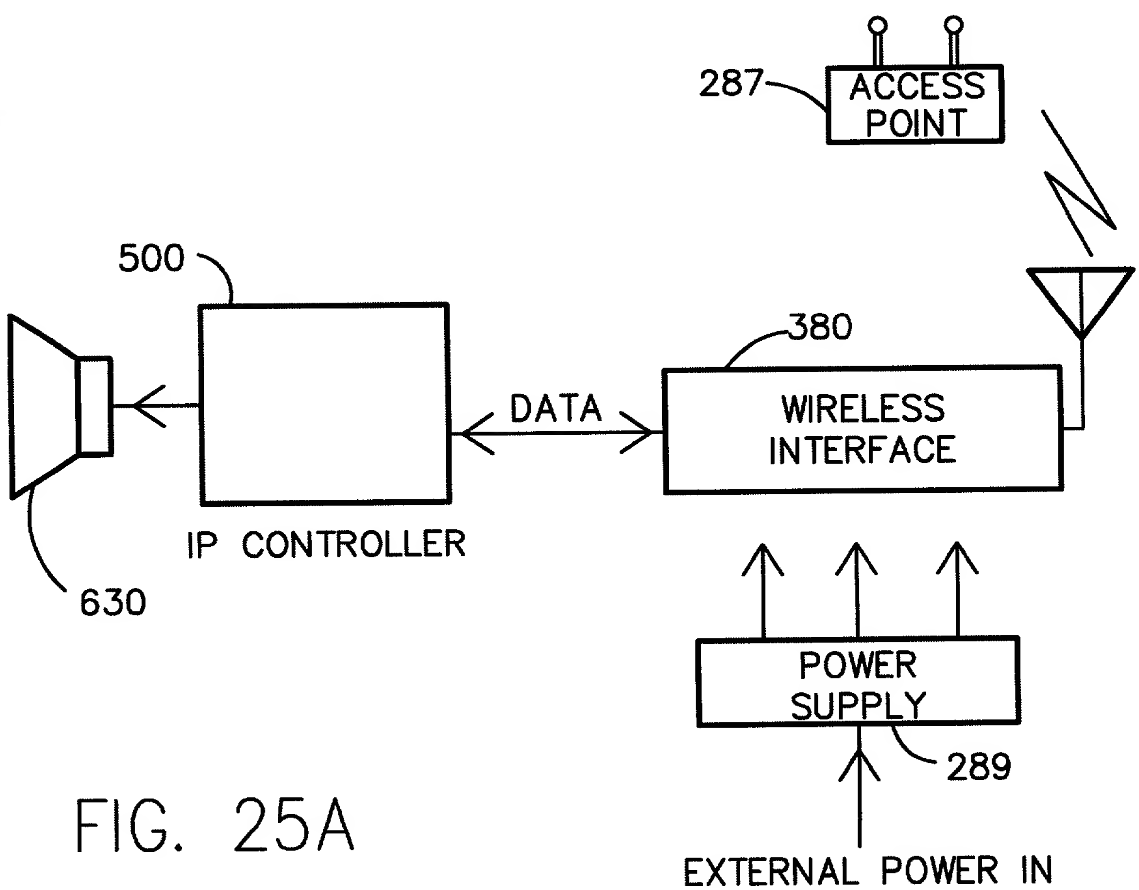
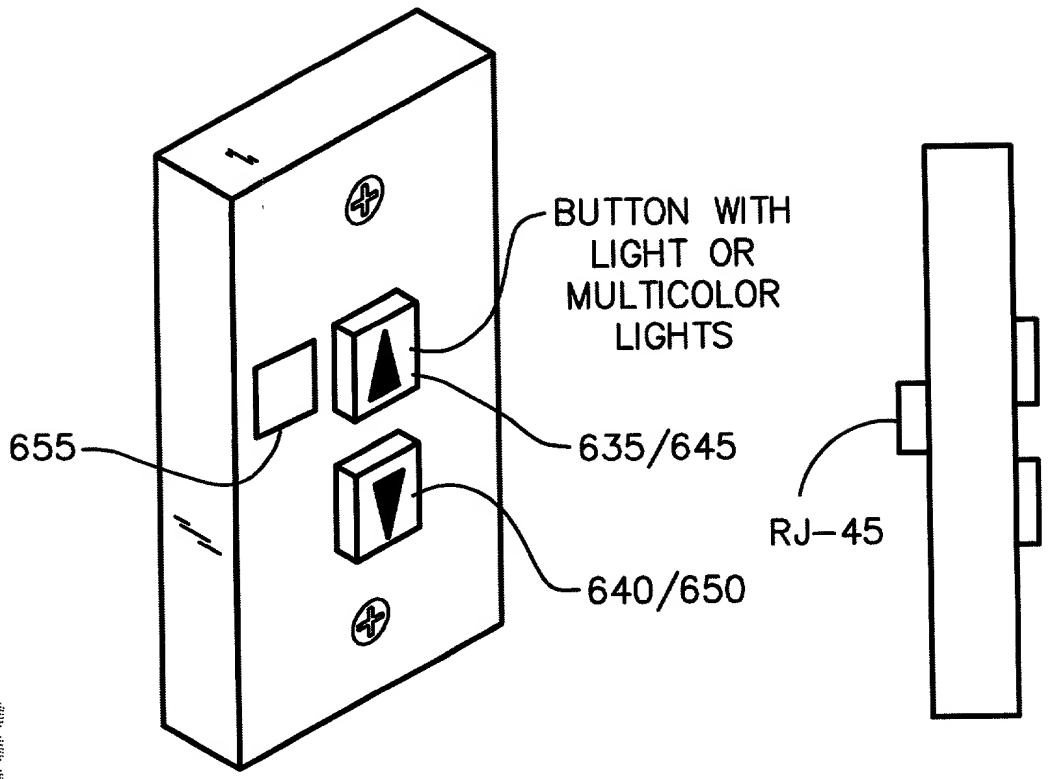


FIG. 25A



CONTROL SWITCH
INDICATOR LIGHT

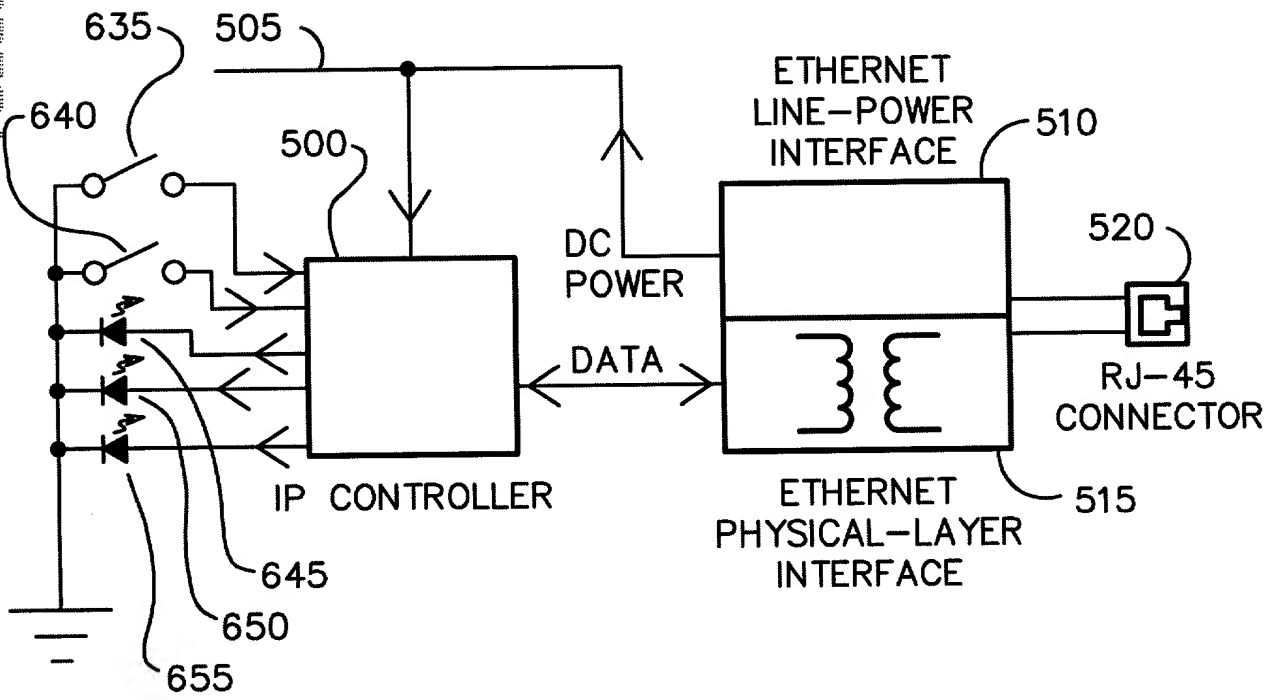
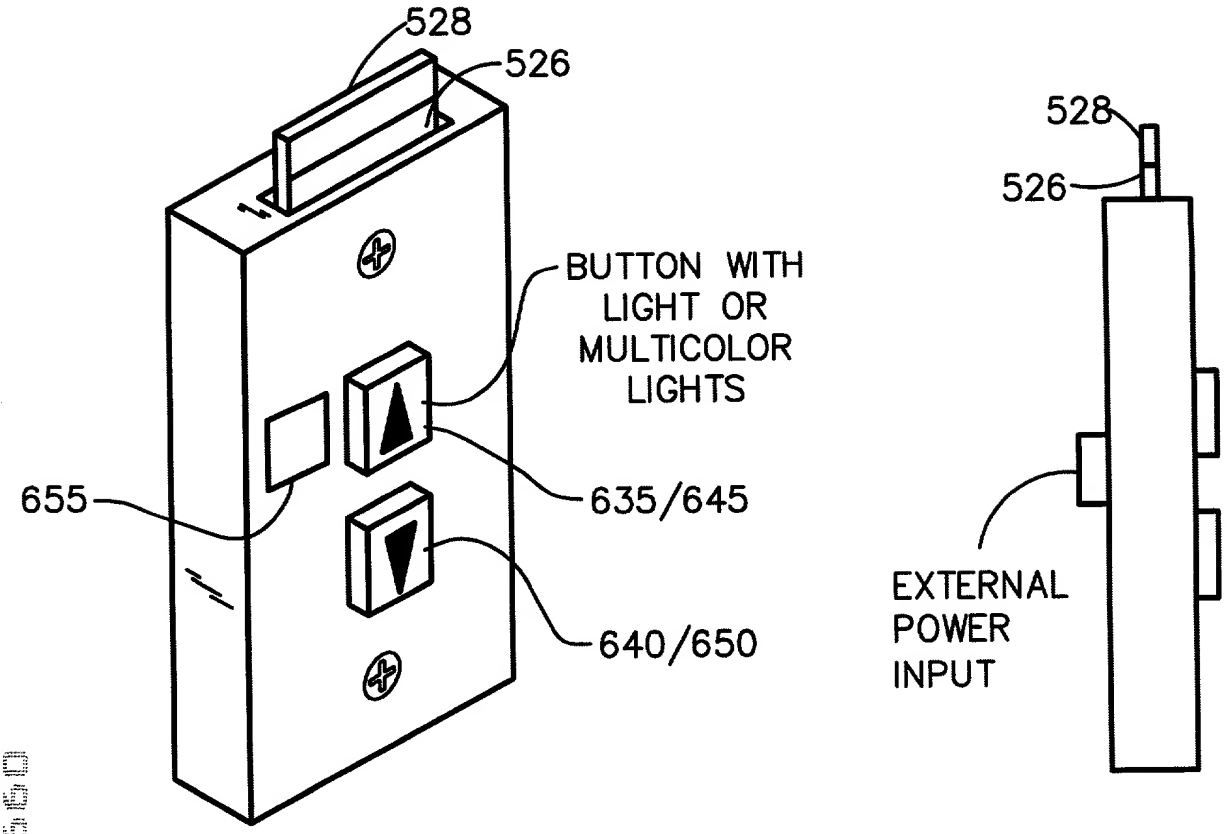


FIG. 26



CONTROL SWITCH INDICATOR LIGHT

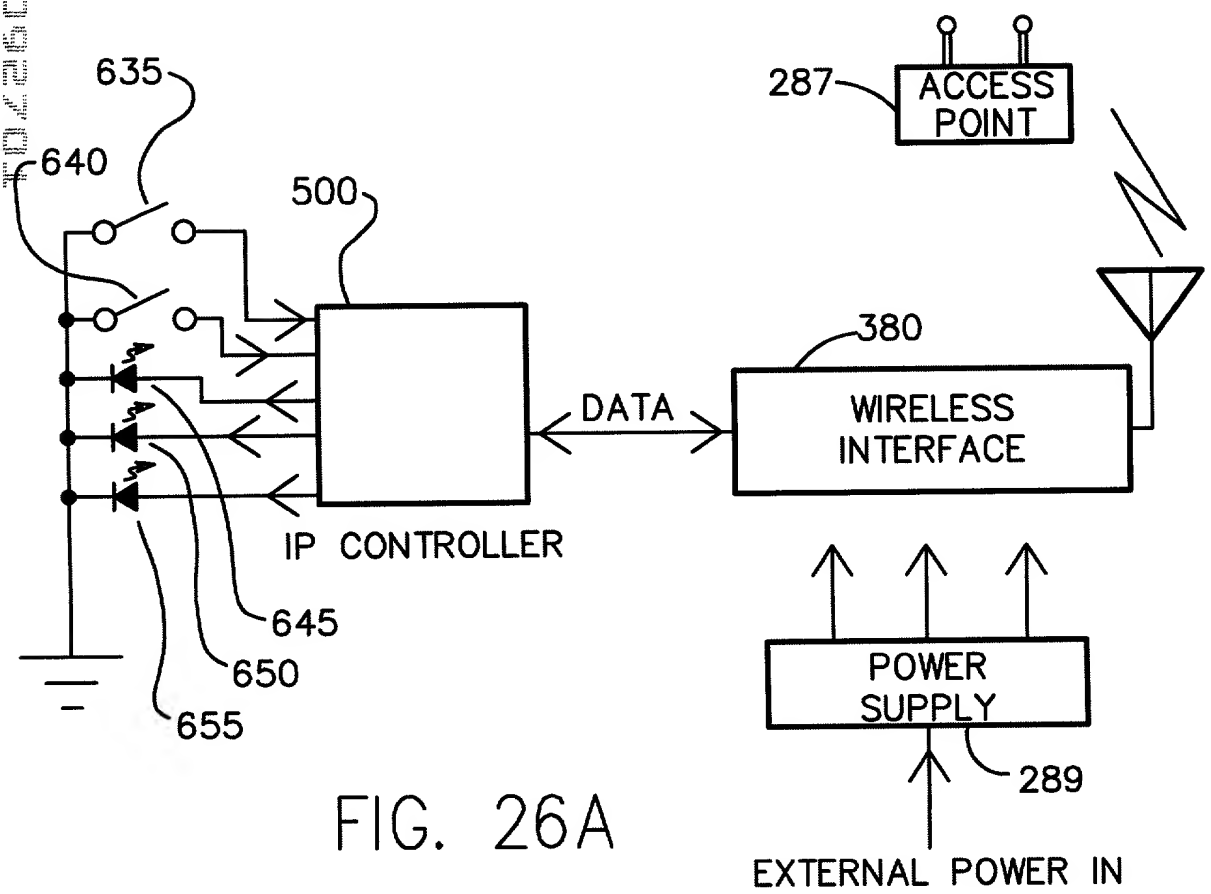
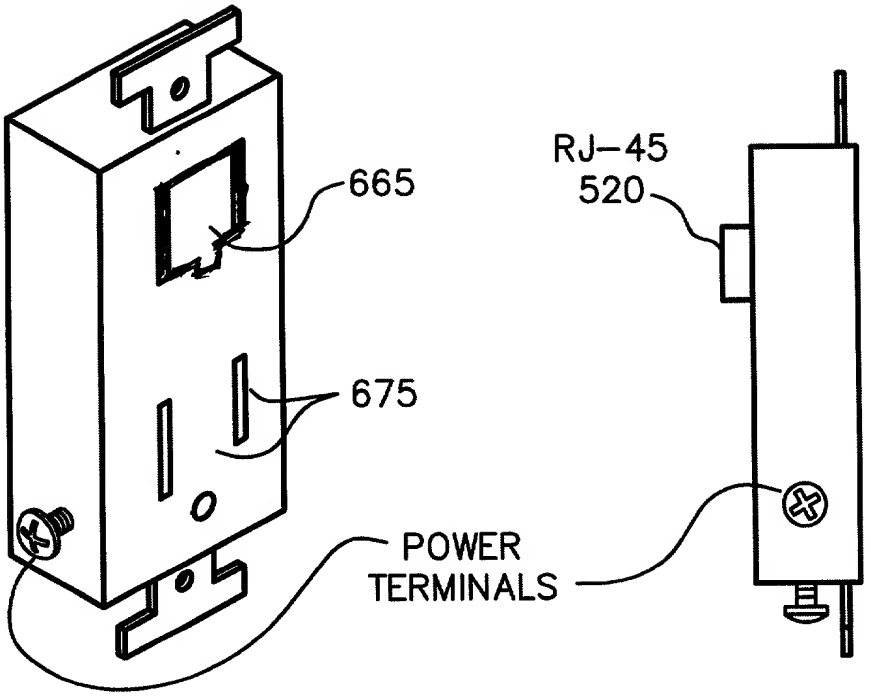


FIG. 26A



POWER CONTROL
(SWITCH OR DIMMER)

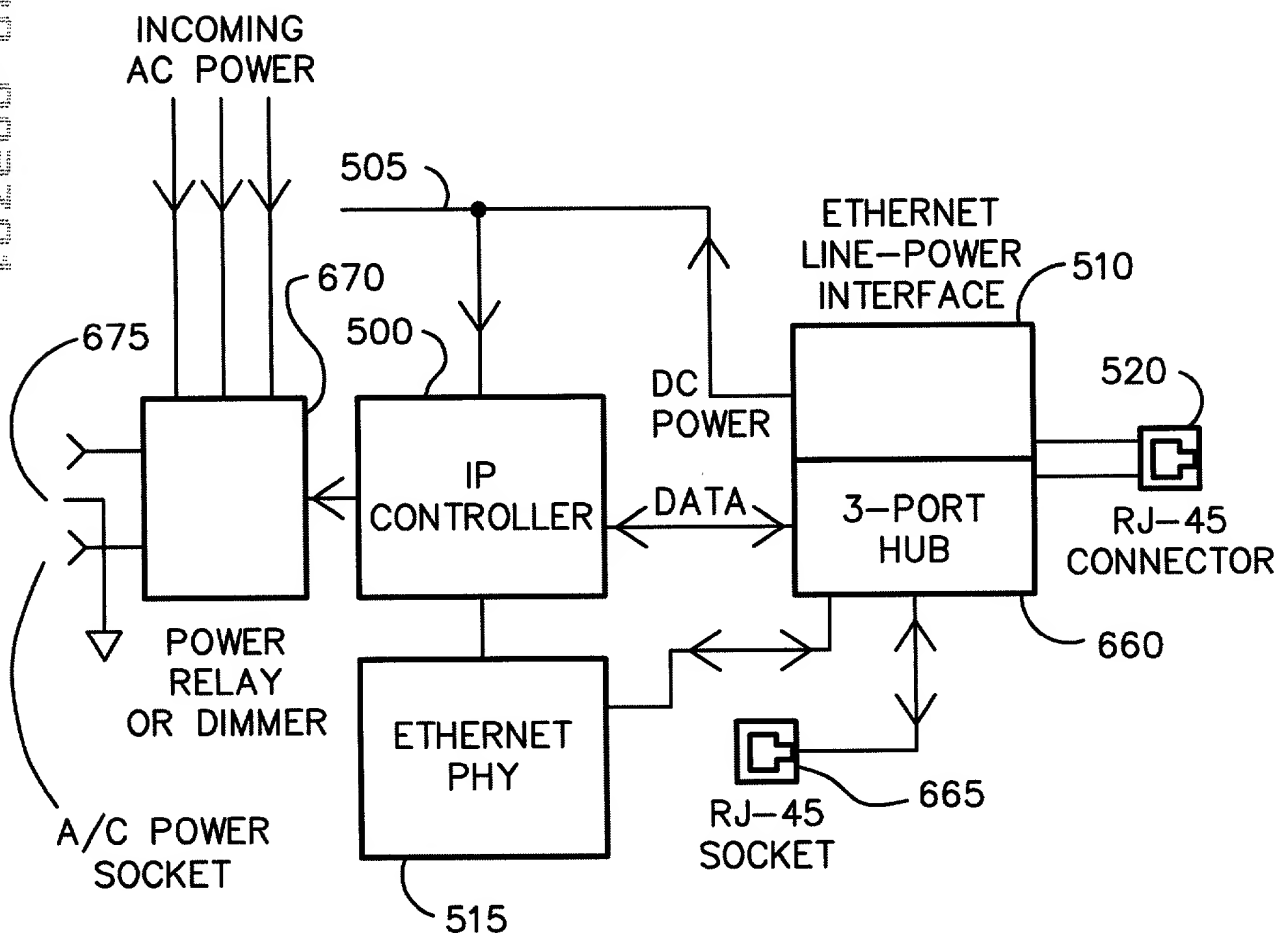
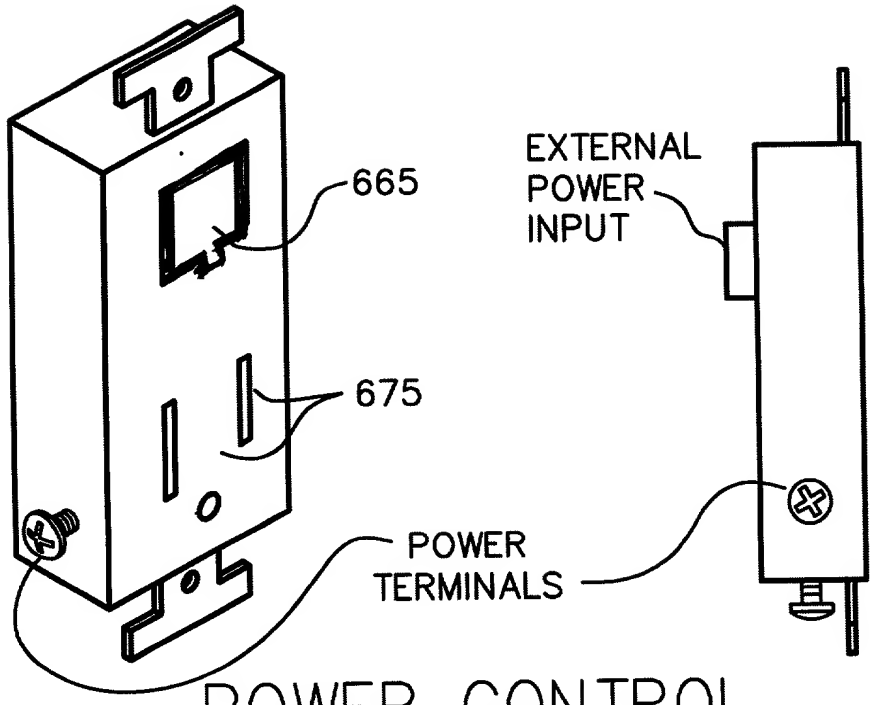


FIG. 27



POWER CONTROL
(SWITCH OR DIMMER)

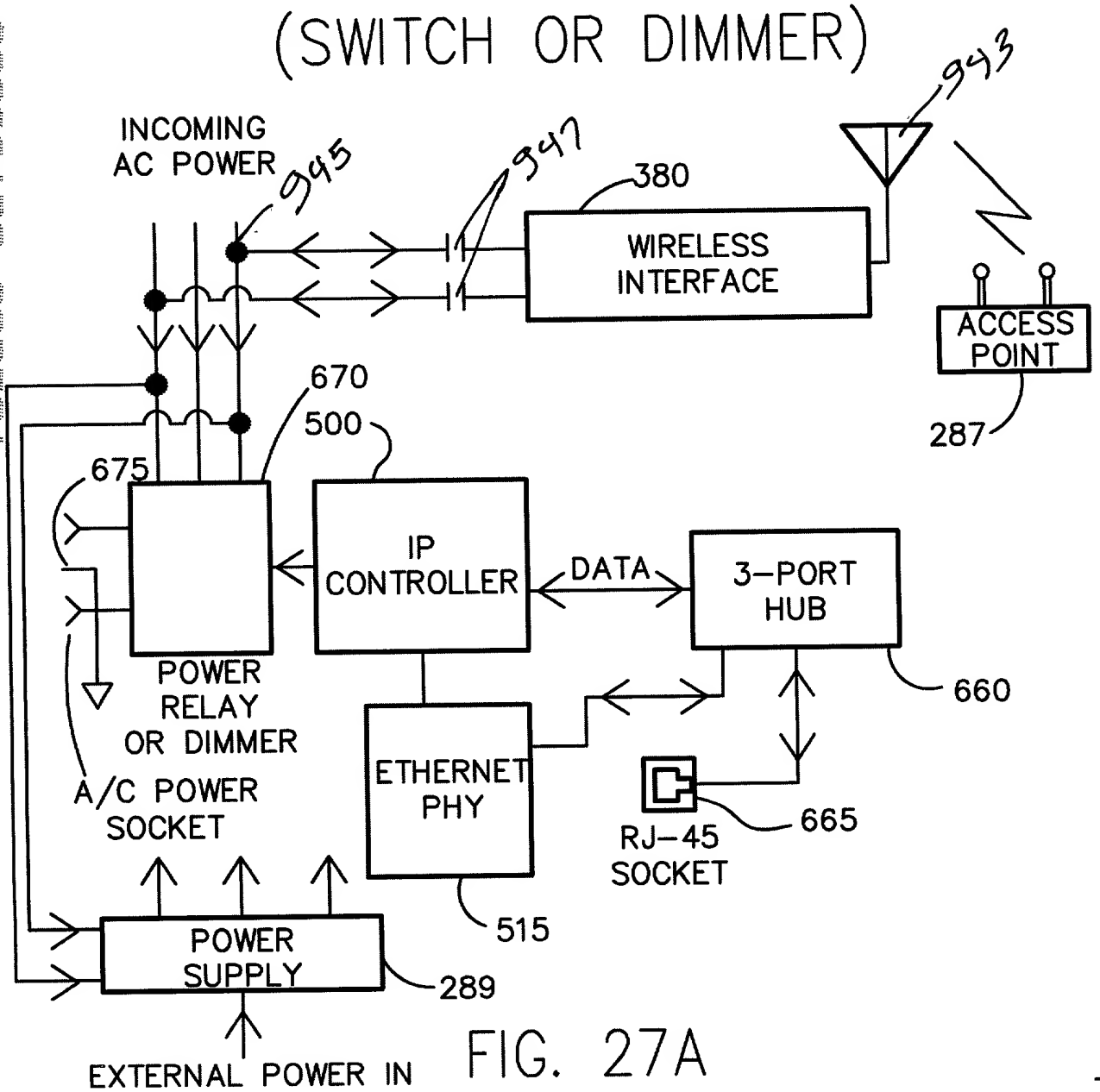
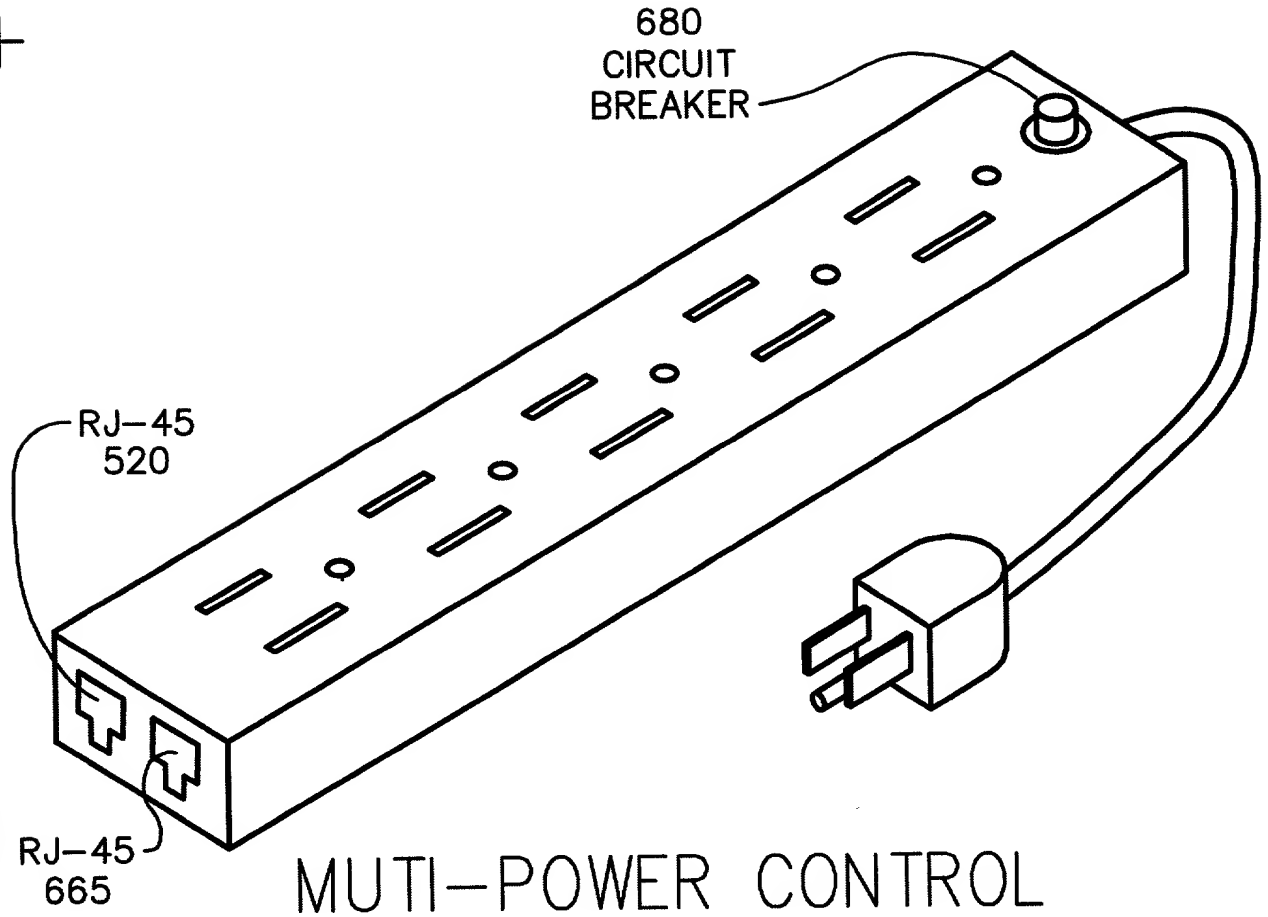


FIG. 27A



MUTI-POWER CONTROL
MULTIPLE SWITCH AND/OR DIMMER

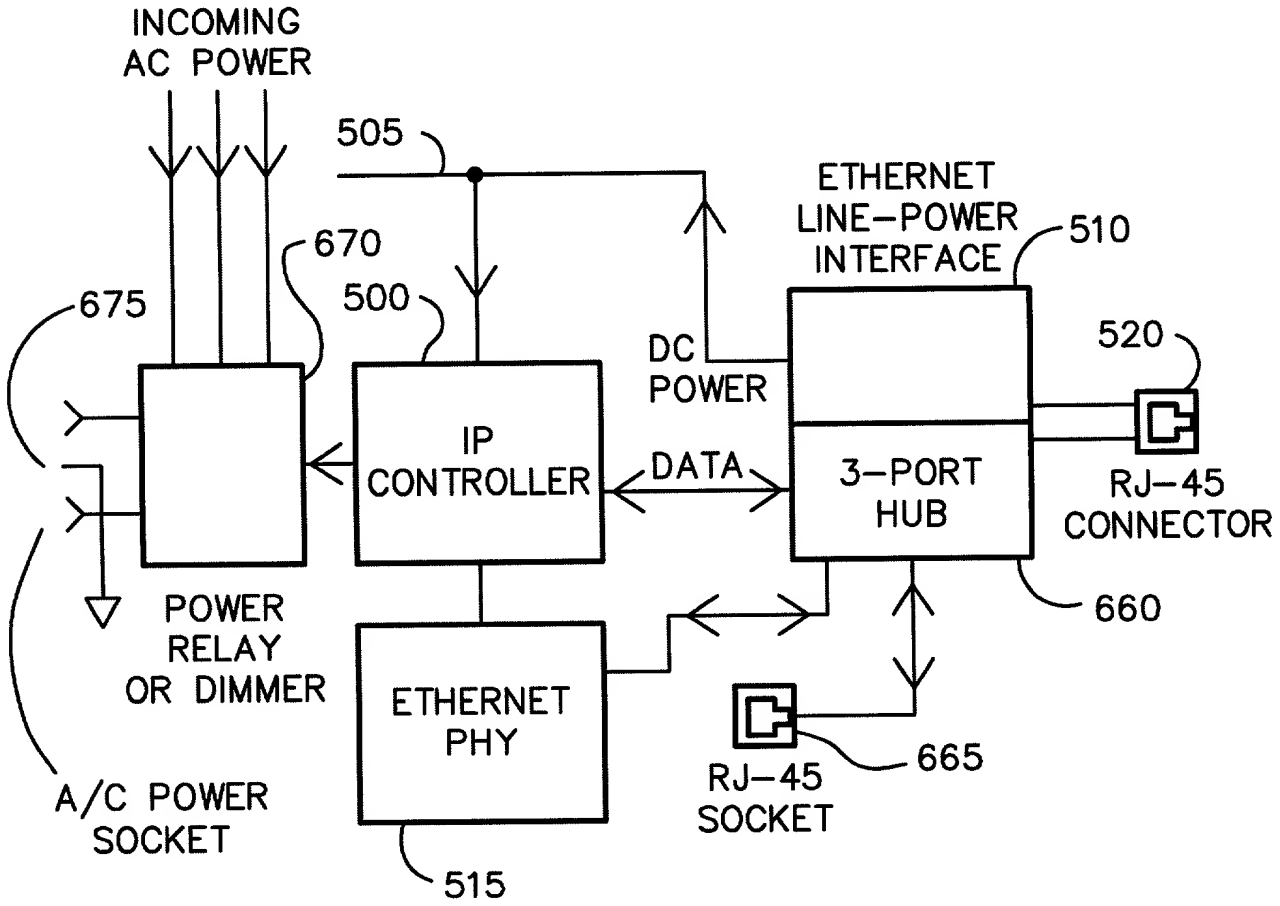
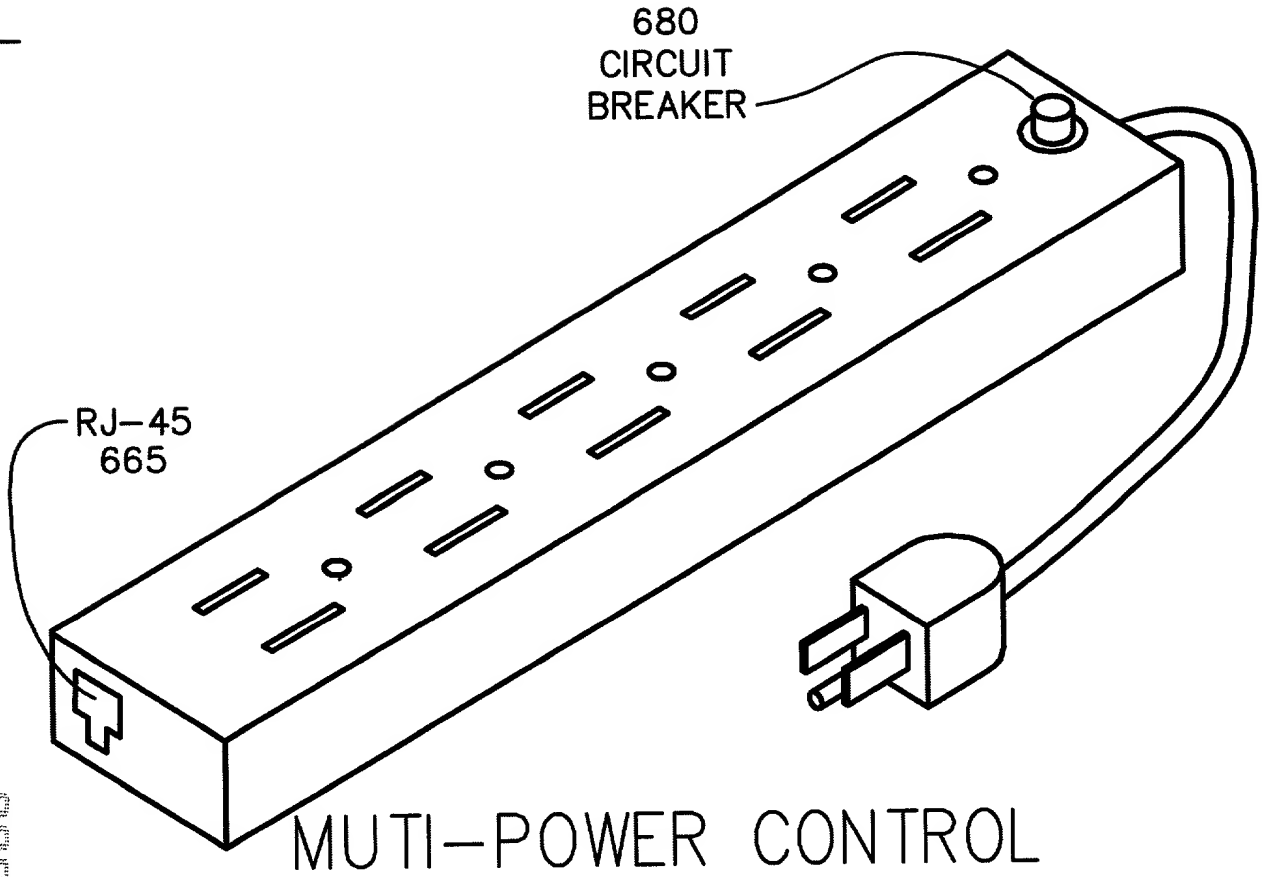
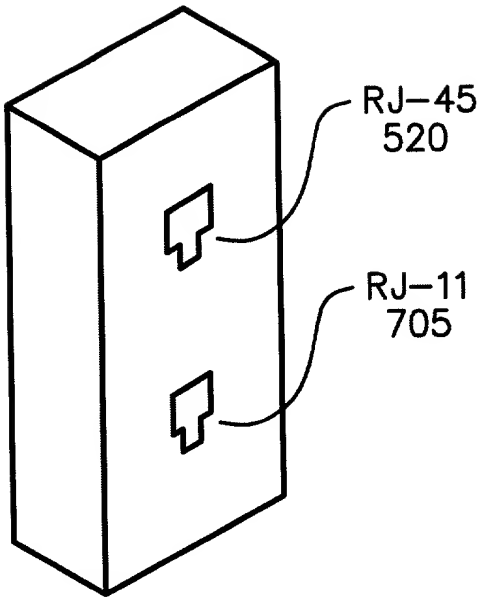


FIG. 28



MUTI-POWER CONTROL MULTIPLE SWITCH AND/OR DIMMER

FIG. 28A



TELEPHONE DIALER/INTERFACE

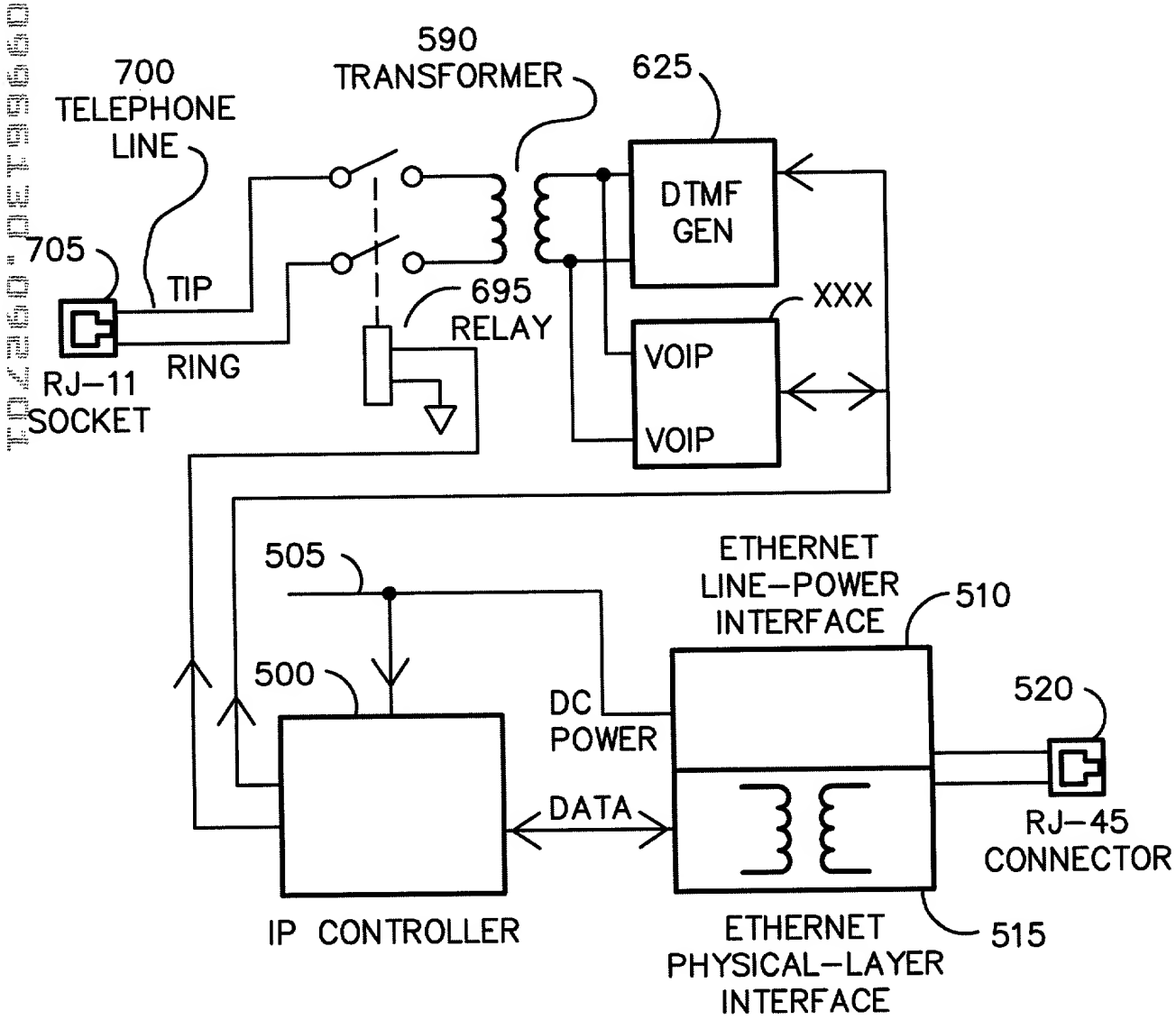
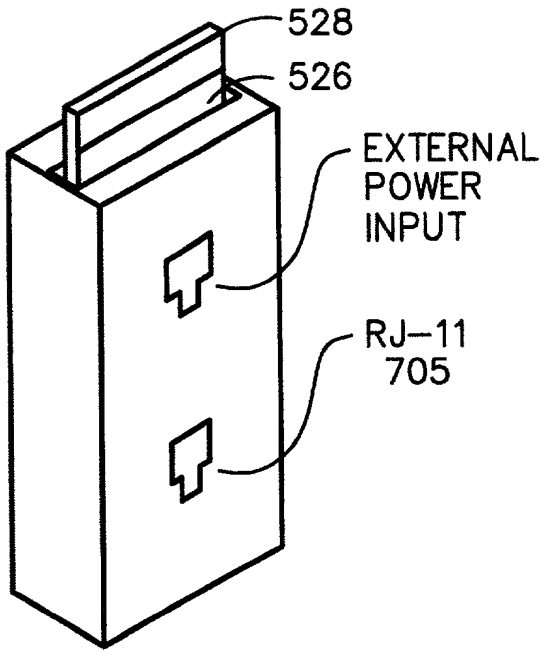


FIG. 29



TELEPHONE DIALER/INTERFACE

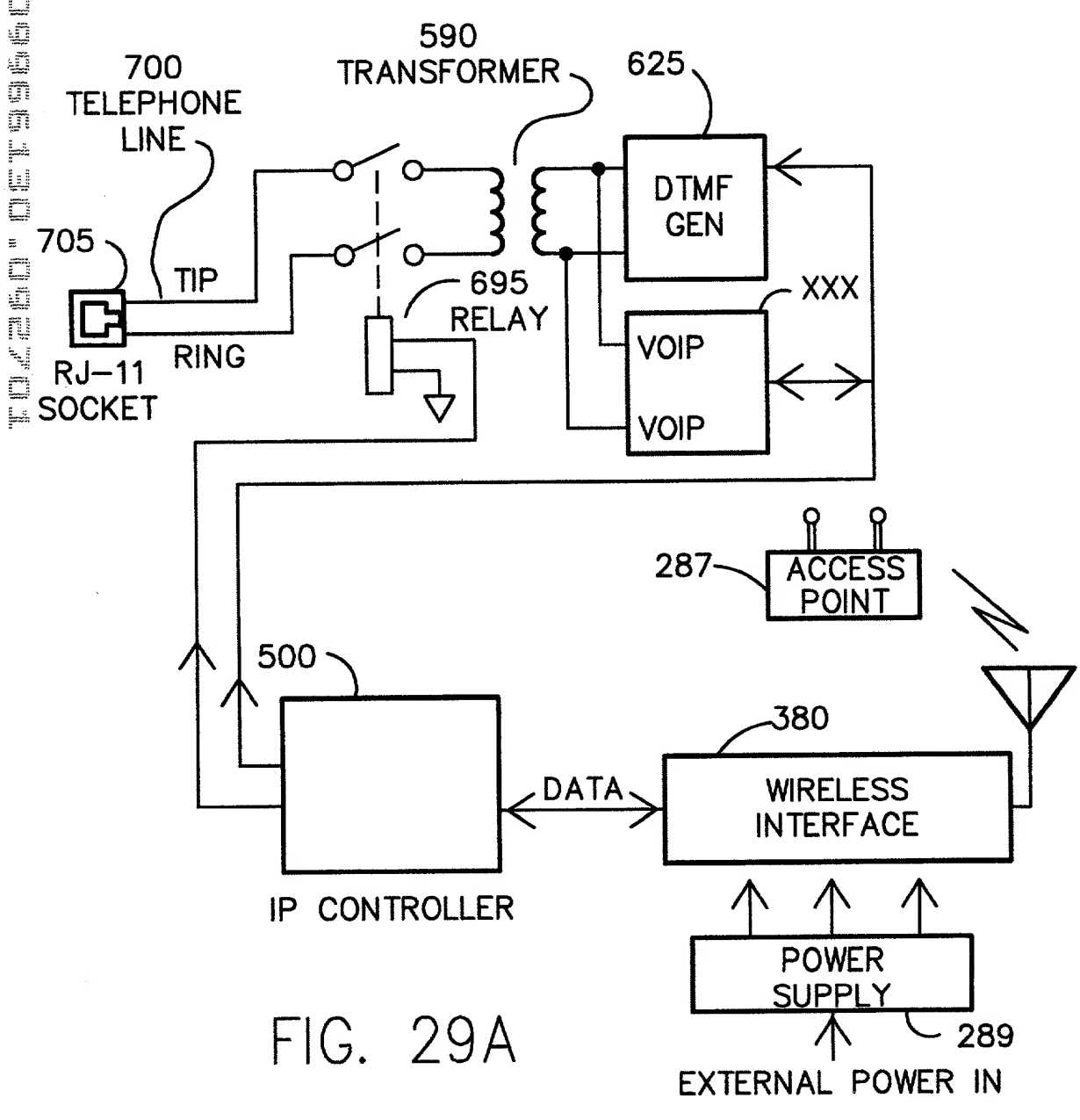
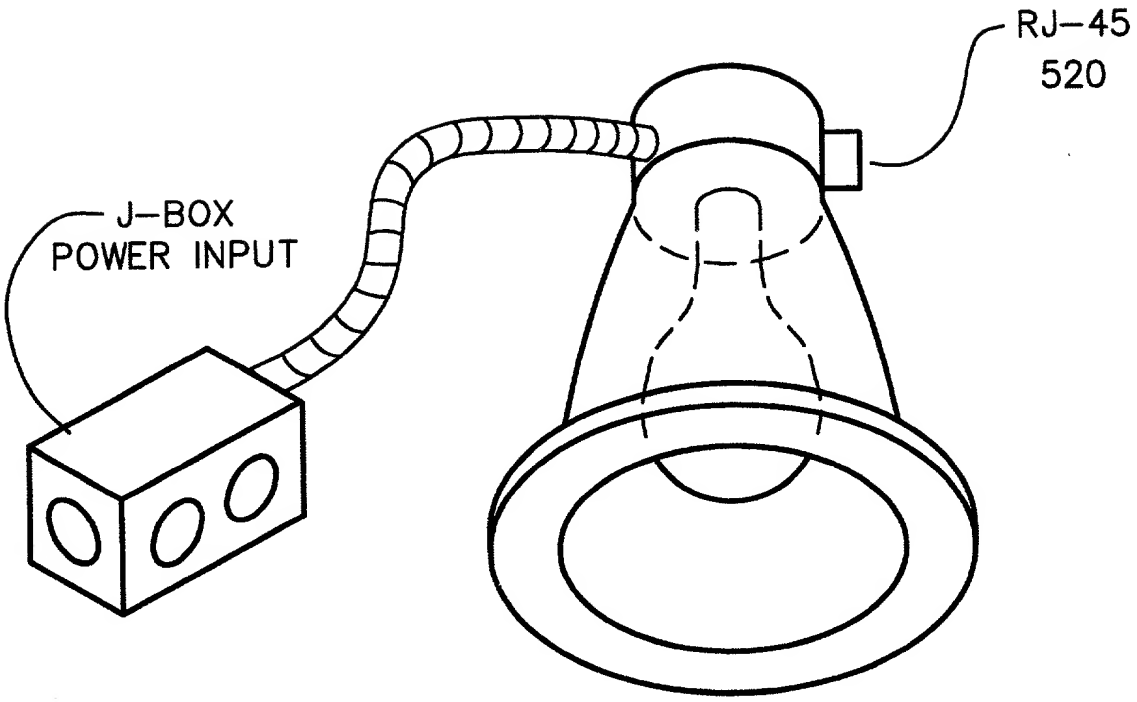


FIG. 29A



LIGHT FIXTURE

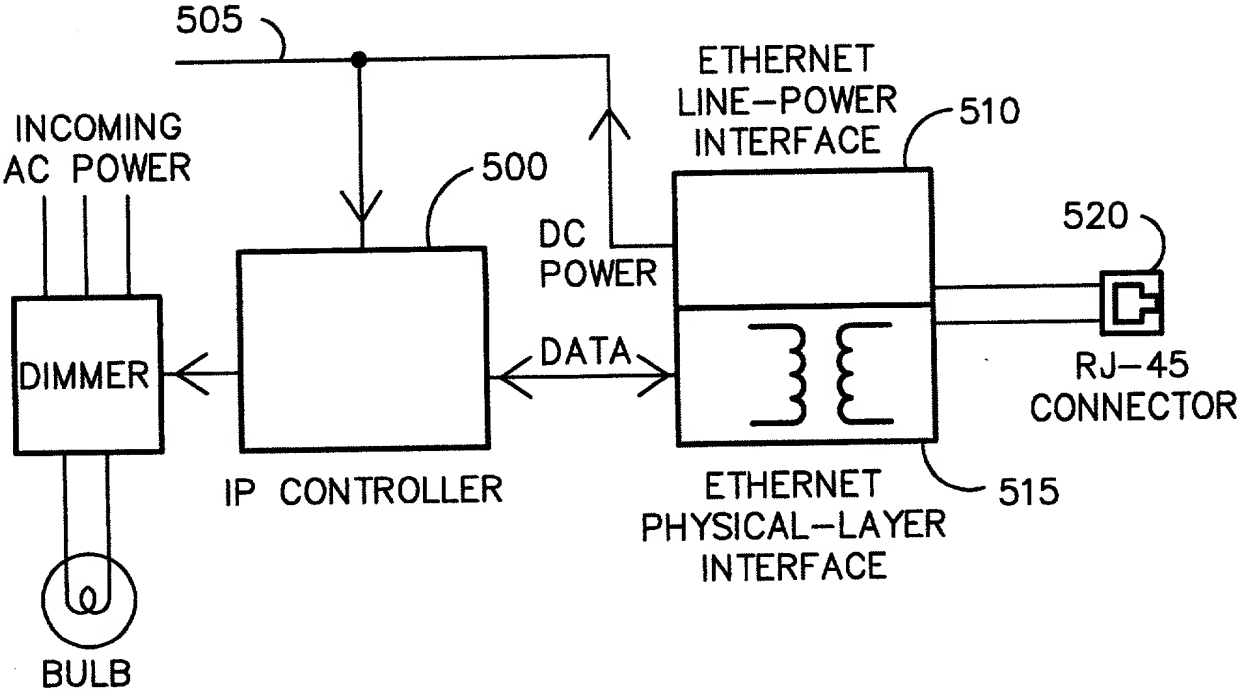
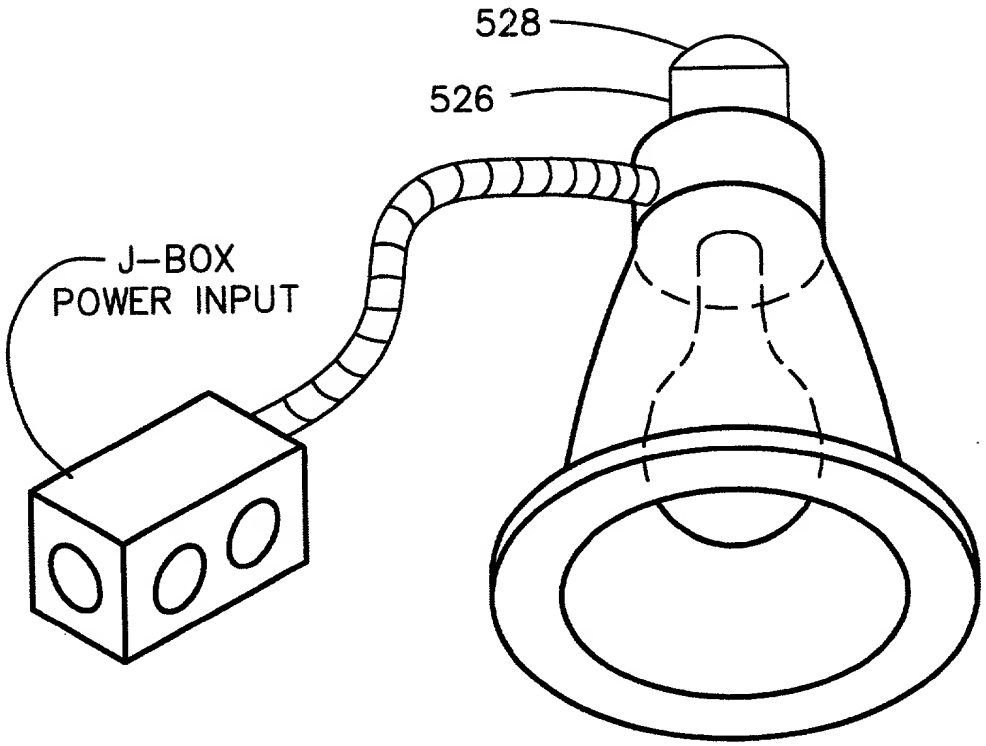


FIG. 30



LIGHT FIXTURE

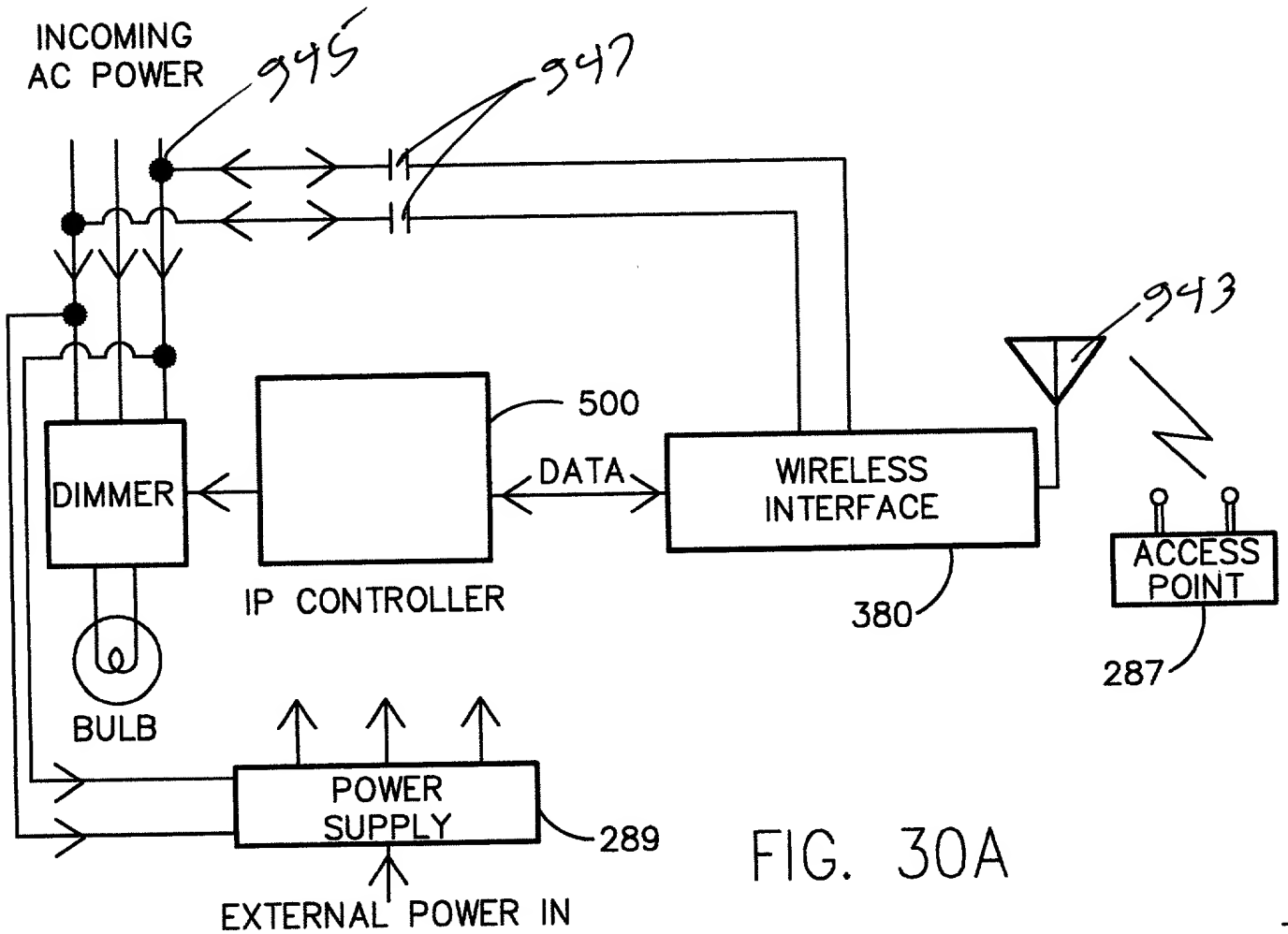
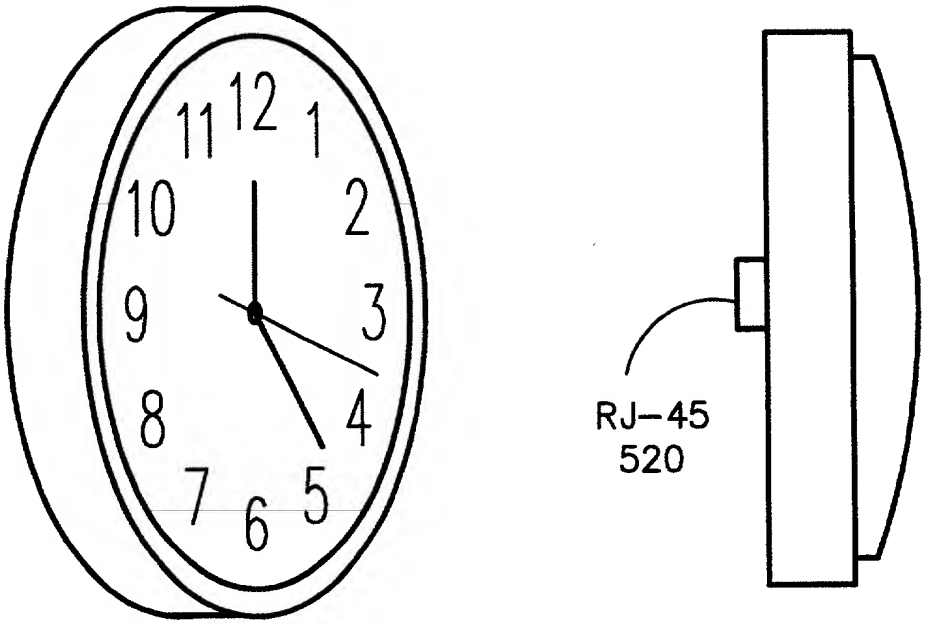


FIG. 30A


12
1
2
3
4
5
6
7
8
9
10
11
RJ–45
520

CLOCK

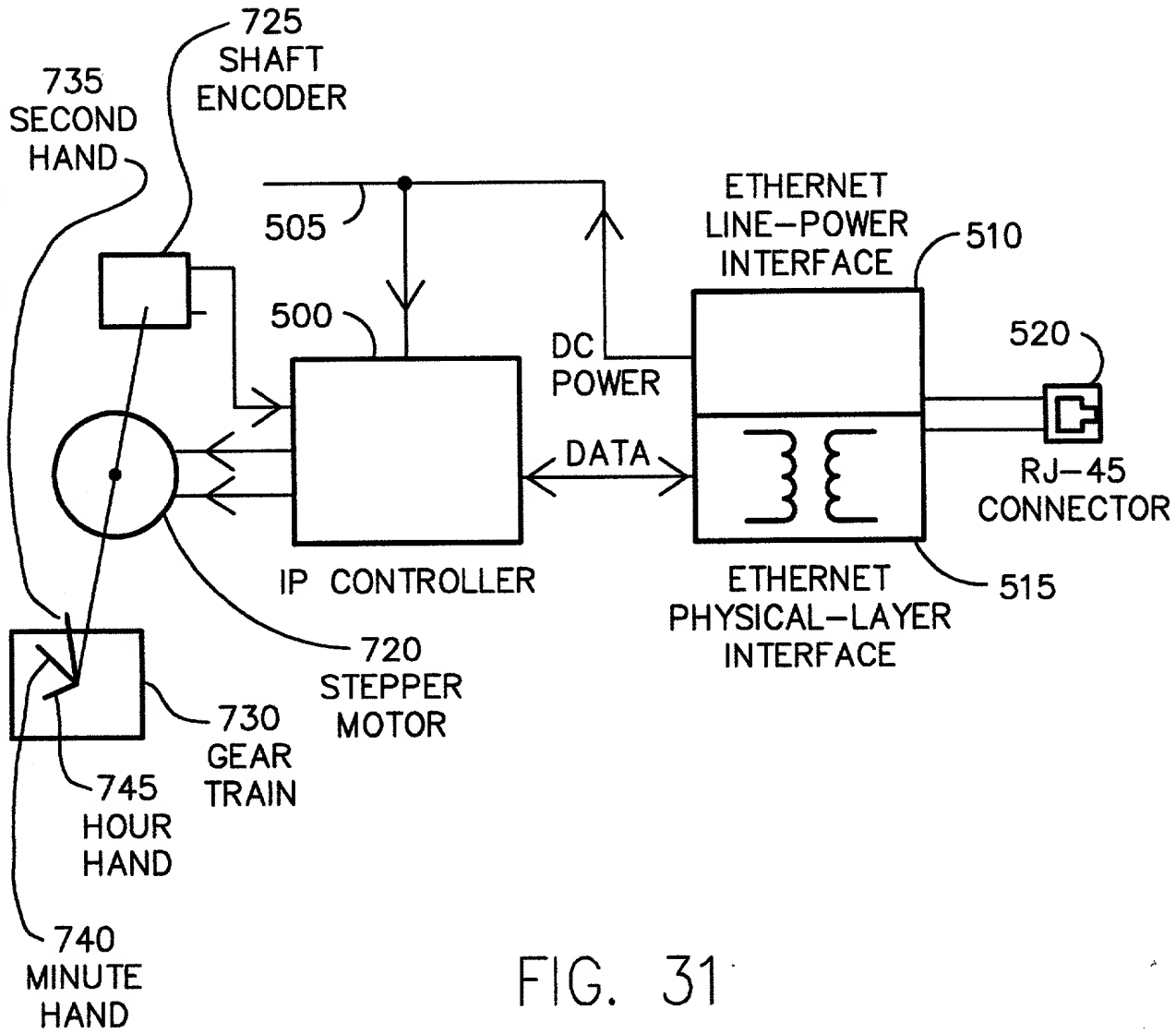
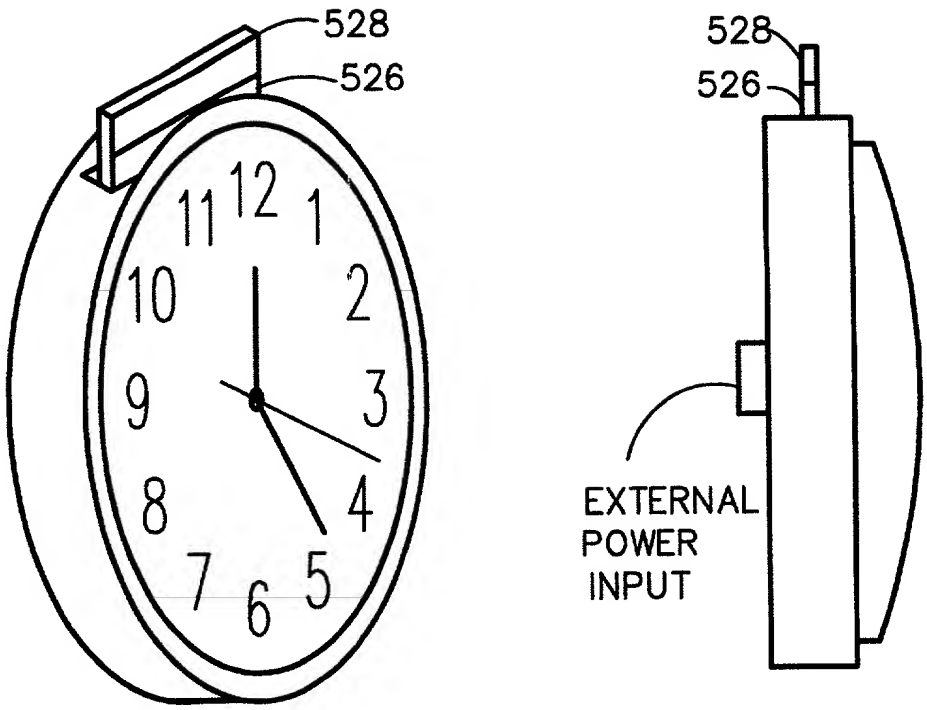

725
SHAFT
ENCODER
735
SECOND
HAND
505
500
ETHERNET
LINE–POWER
INTERFACE
510
520
DC
POWER
DATA
RJ–45
CONNECTOR
IP CONTROLLER
ETHERNET
PHYSICAL–LAYER
INTERFACE
515
720
STEPPER
MOTOR
730
GEAR
TRAIN
745
HOUR
HAND
740
MINUTE
HAND

FIG. 31



CLOCK

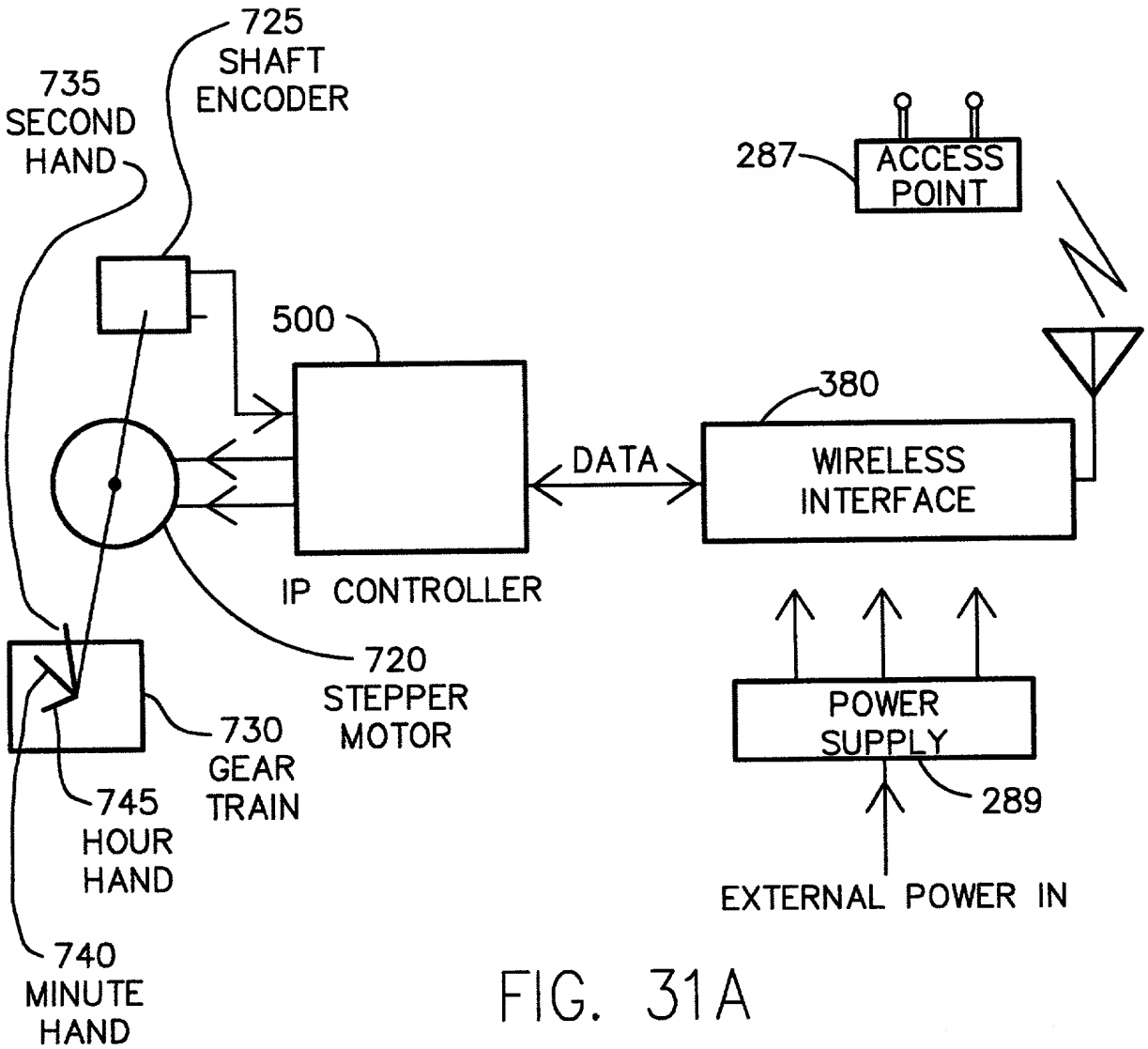
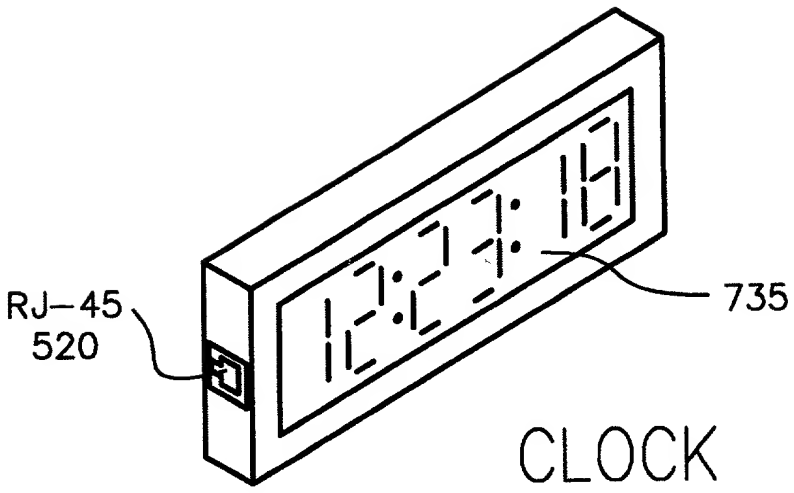


FIG. 31A


RJ-45
520
735
CLOCK

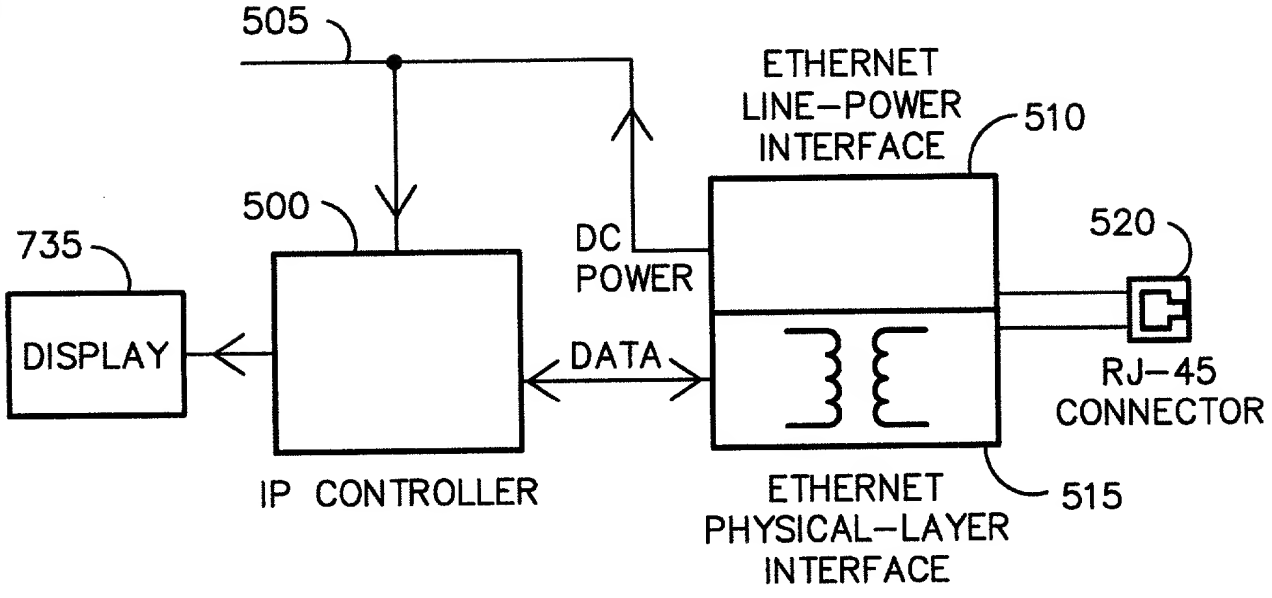
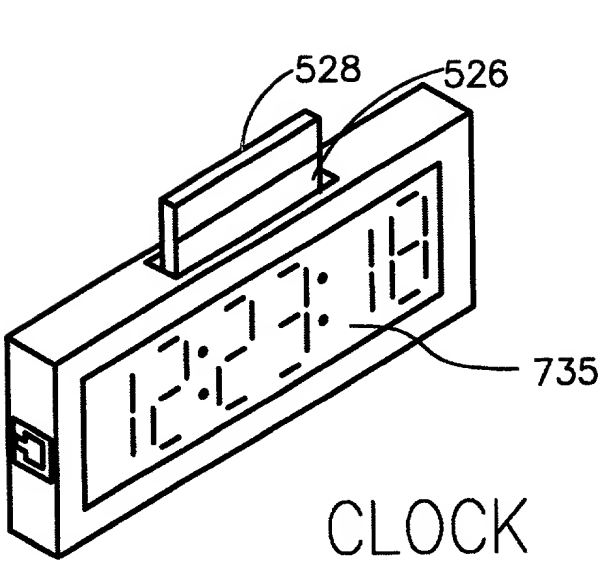
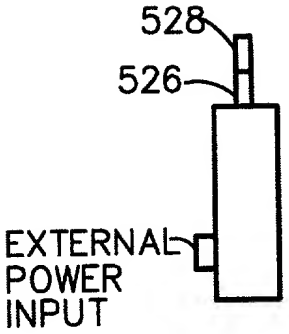

505
ETHERNET
LINE-POWER
INTERFACE
510
500
735
DC
POWER
520
DISPLAY
DATA
RJ-45
CONNECTOR
IP CONTROLLER
ETHERNET
PHYSICAL-LAYER
INTERFACE
515

FIG. 32



CLOCK



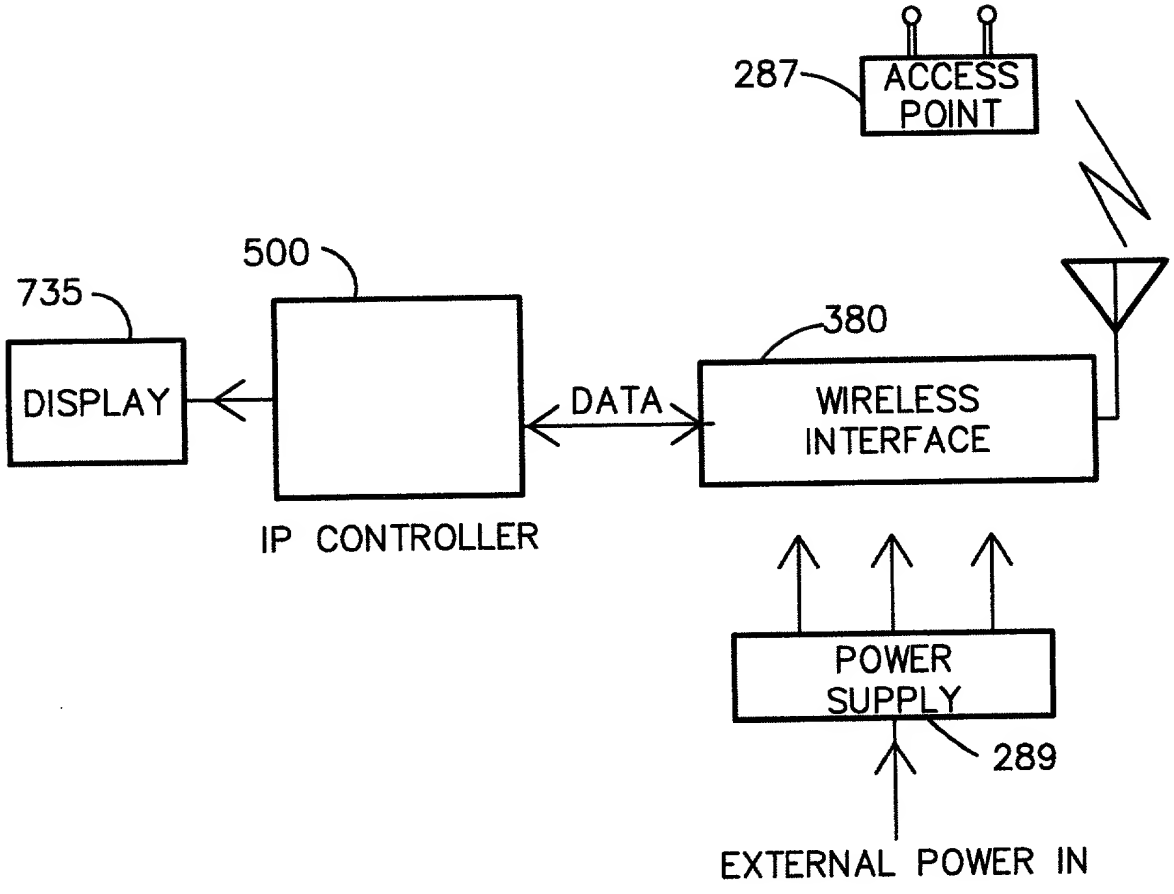
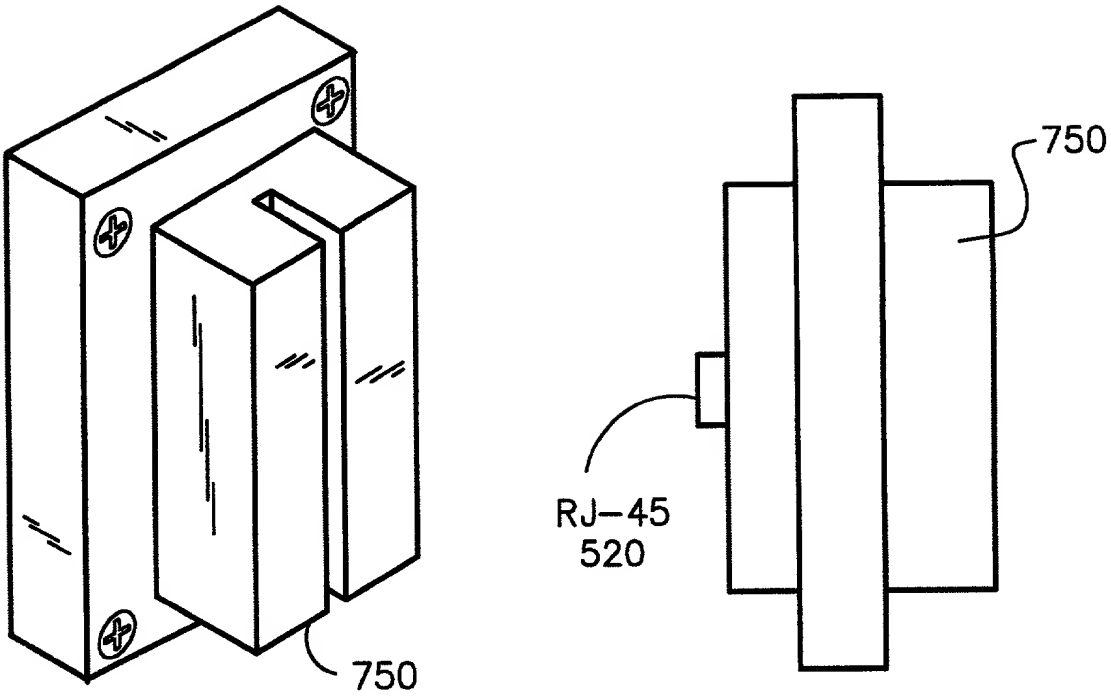


FIG. 32A



MAG STRIP READER

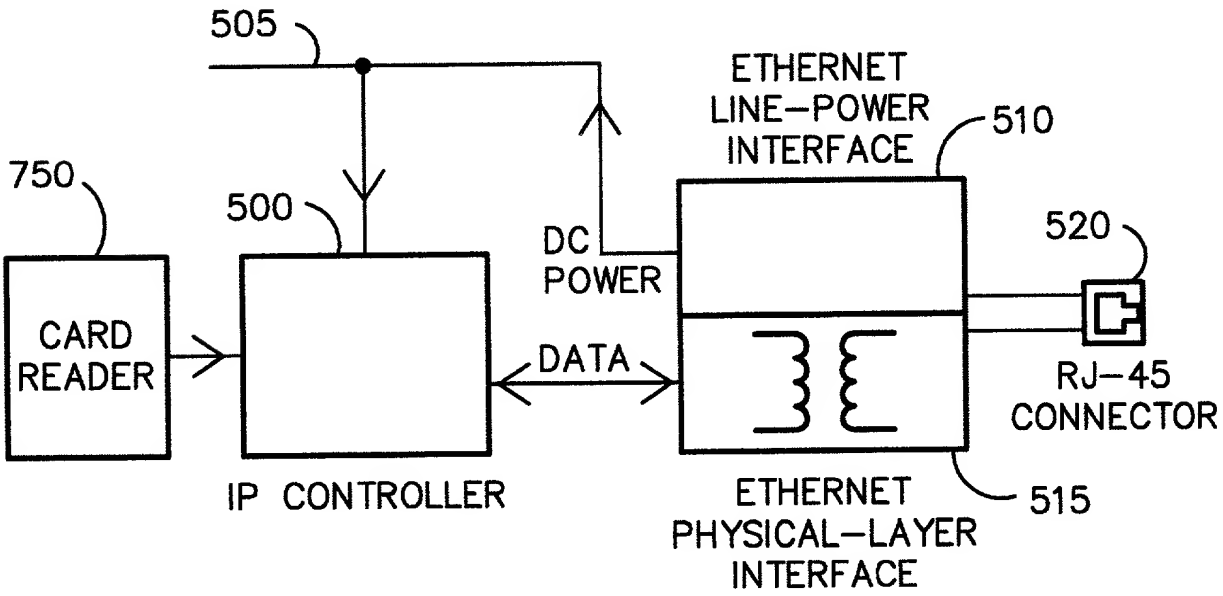
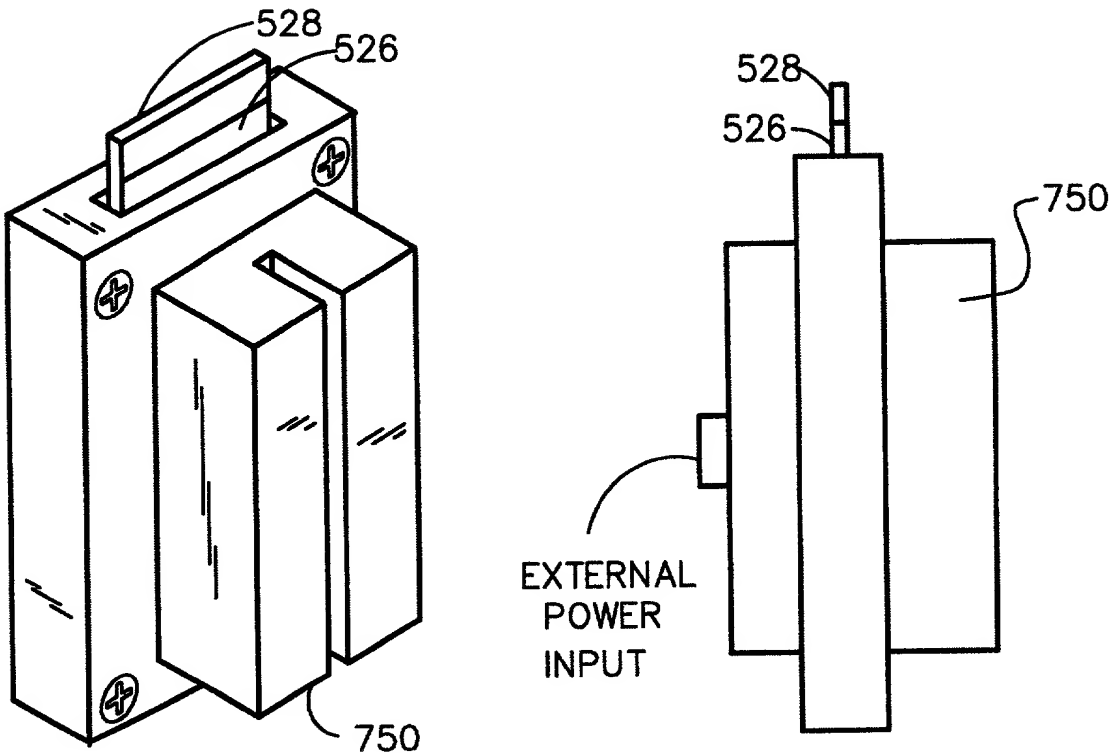


FIG. 33



MAG STRIP READER

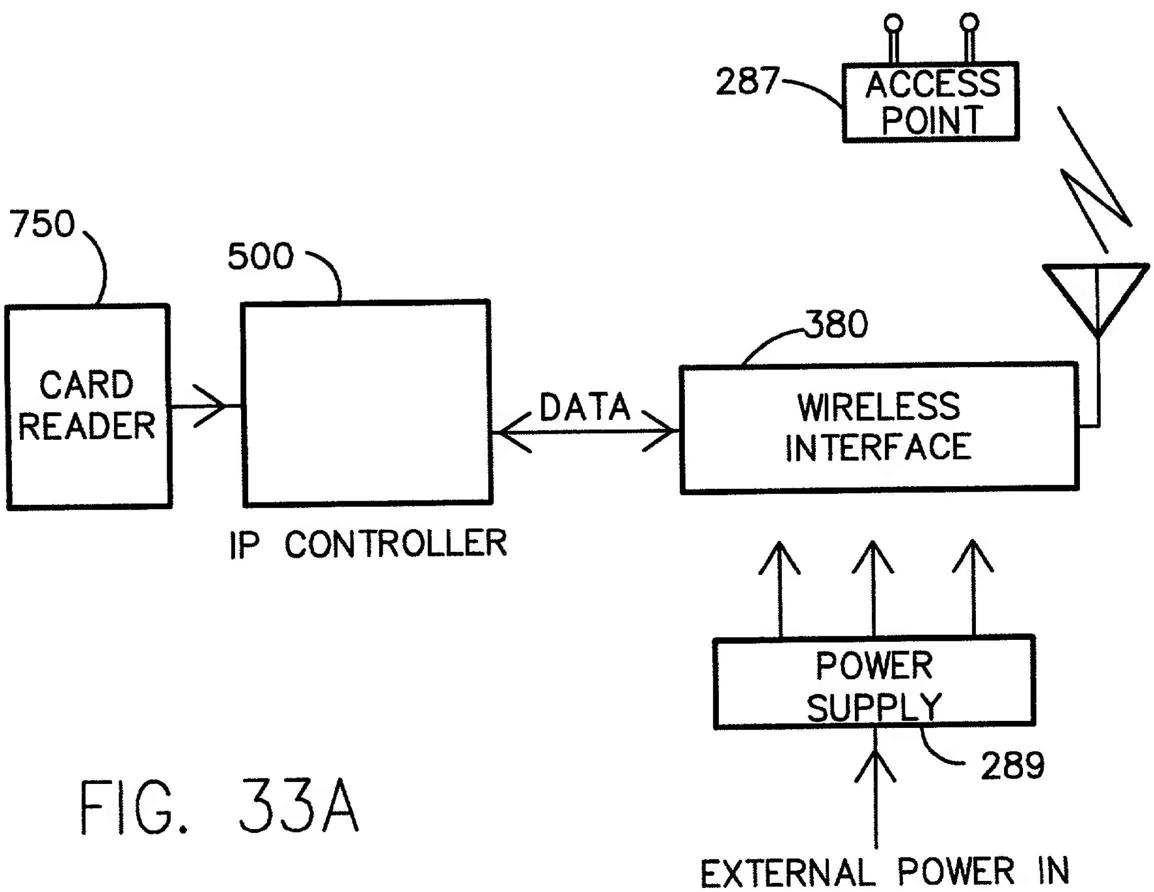
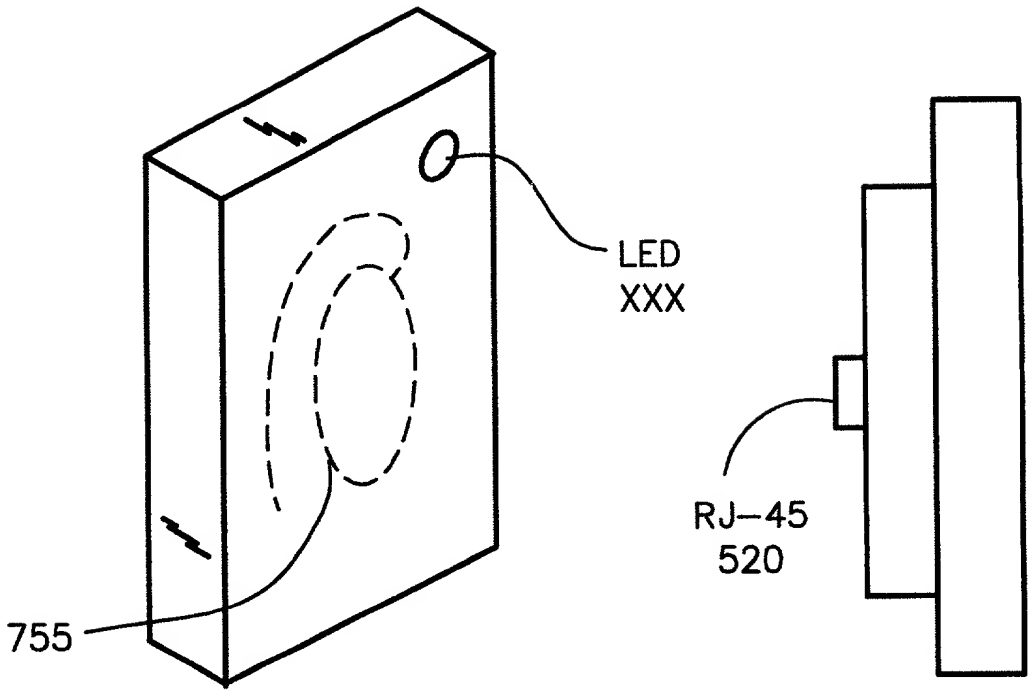


FIG. 33A



PROXIMITY CARD READER

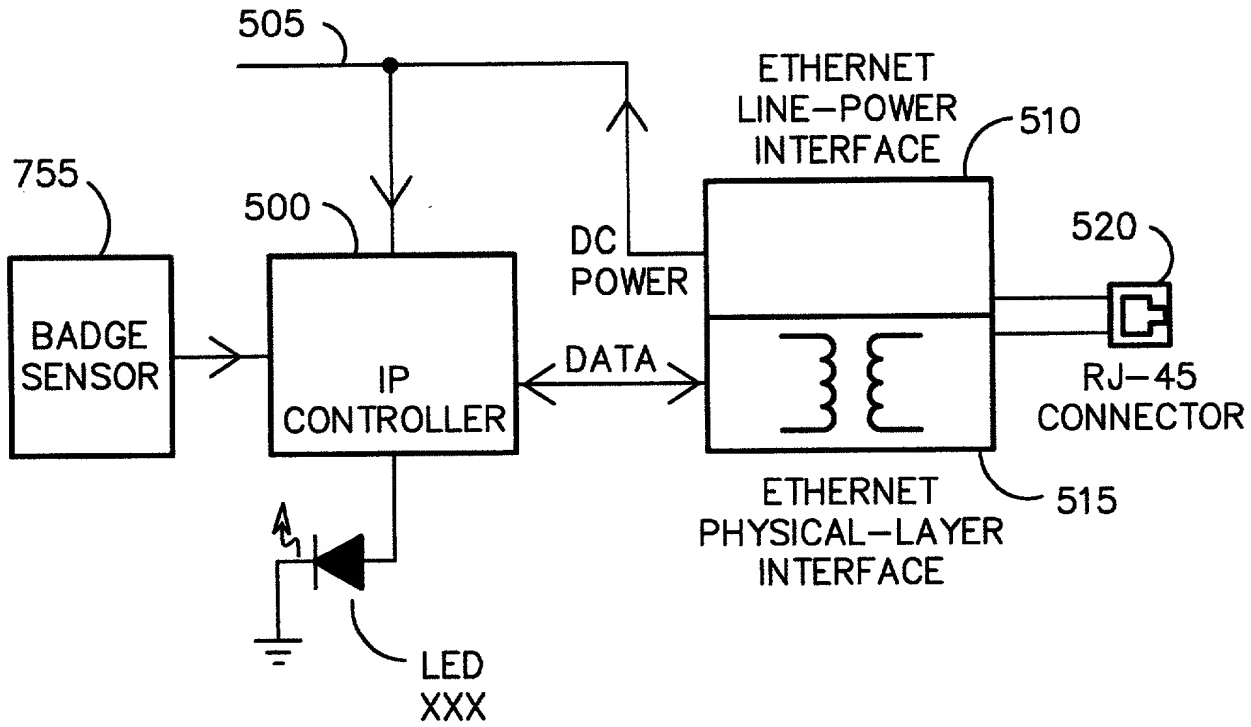
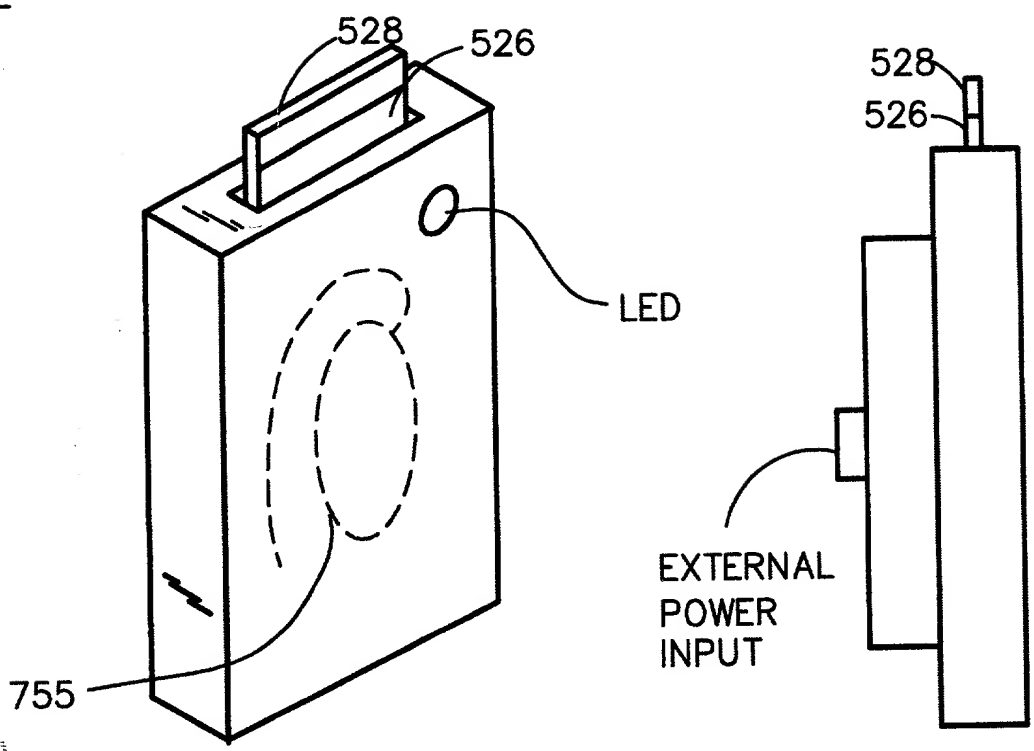


FIG. 34



PROXIMITY CARD READER

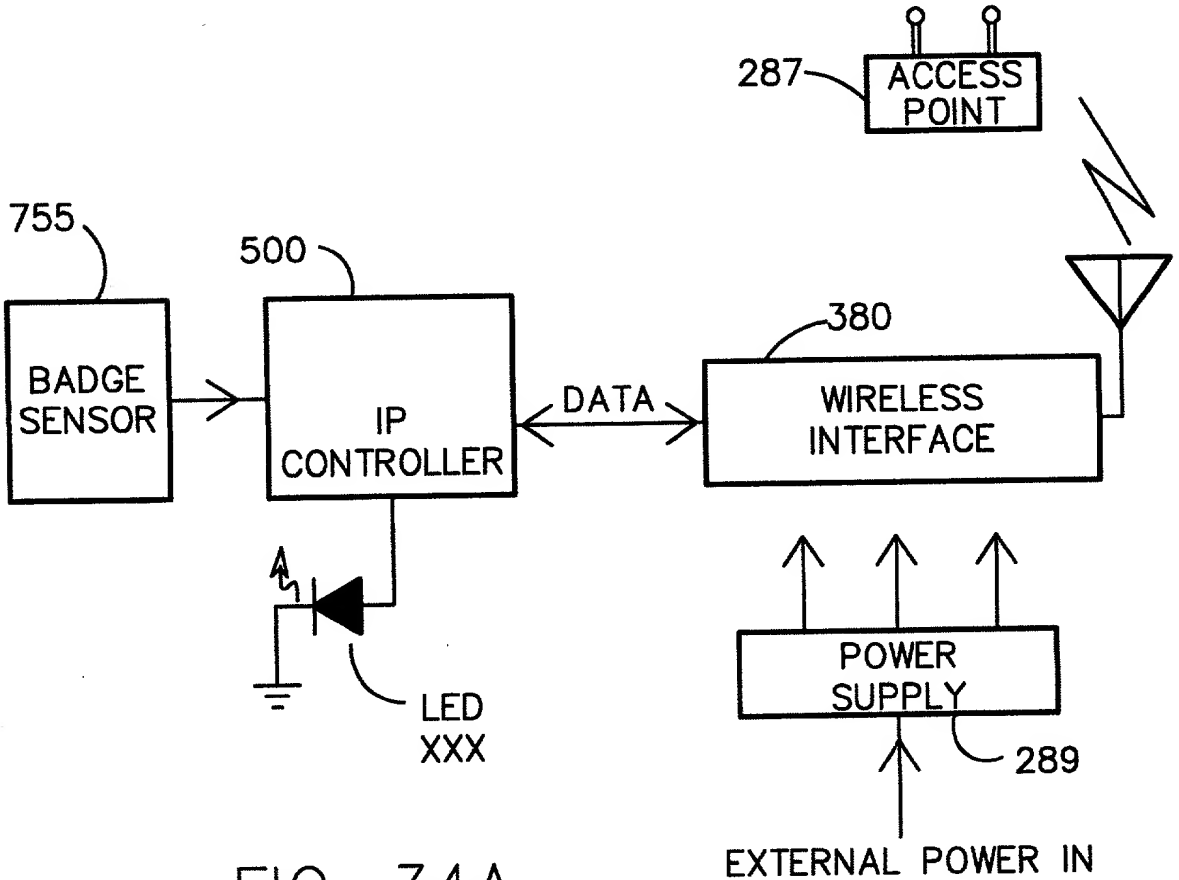


FIG. 34A

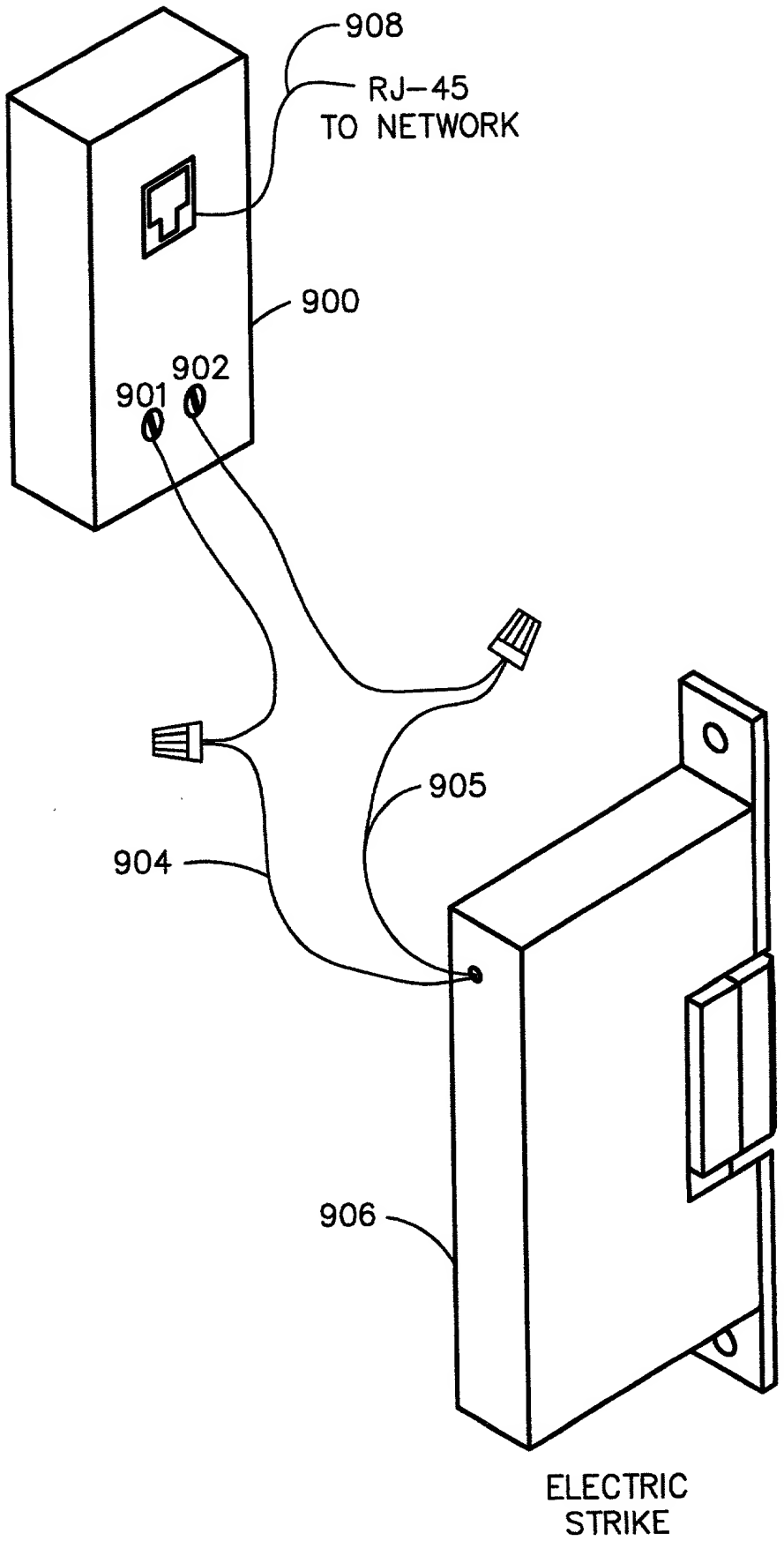


FIG. 35

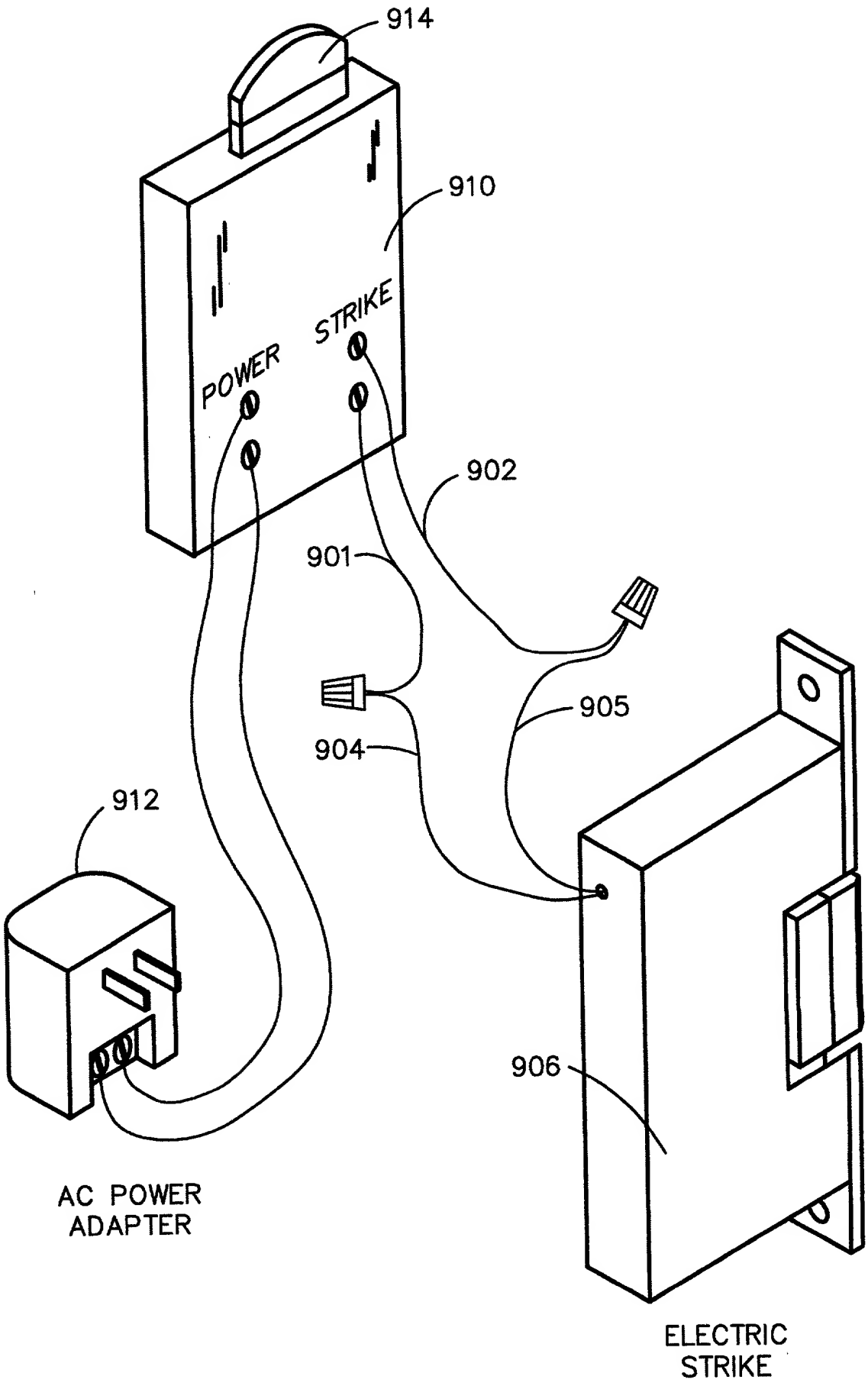

914
910
POWER
STRIKE
902
901
905
904
912
906
AC POWER
ADAPTER
ELECTRIC
STRIKE

FIG. 35A

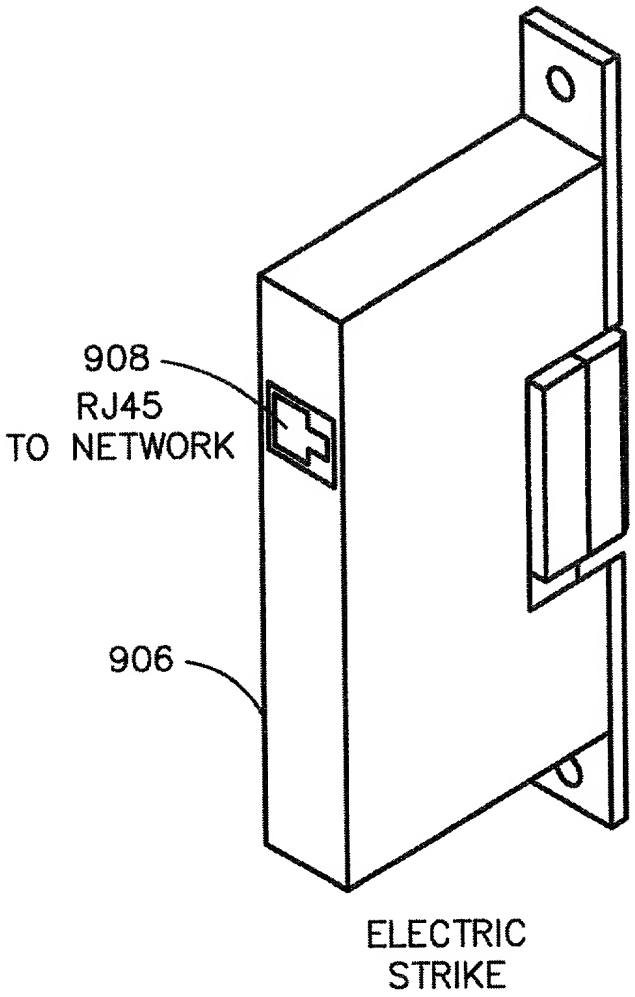


FIG. 35B

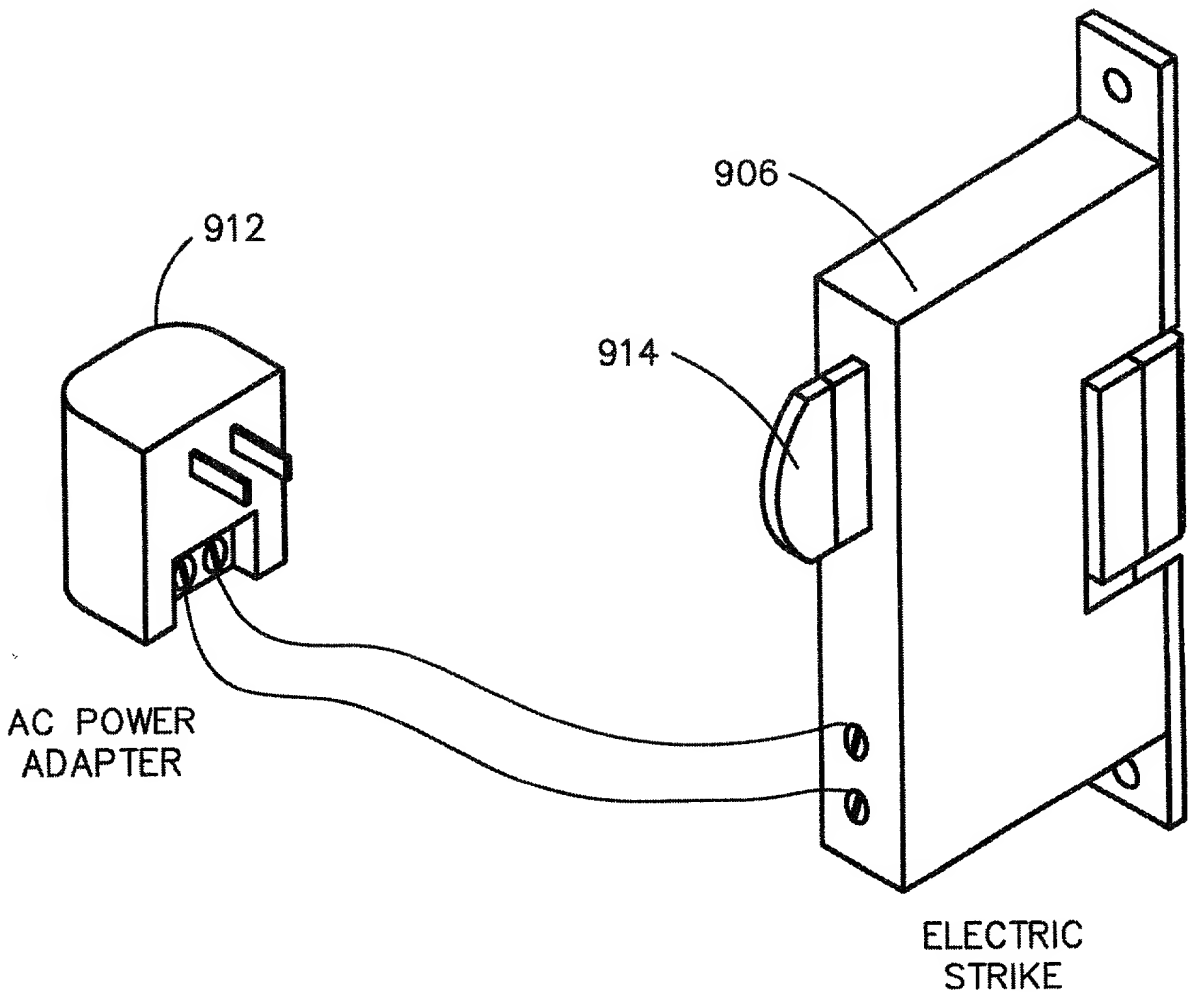


FIG. 35C

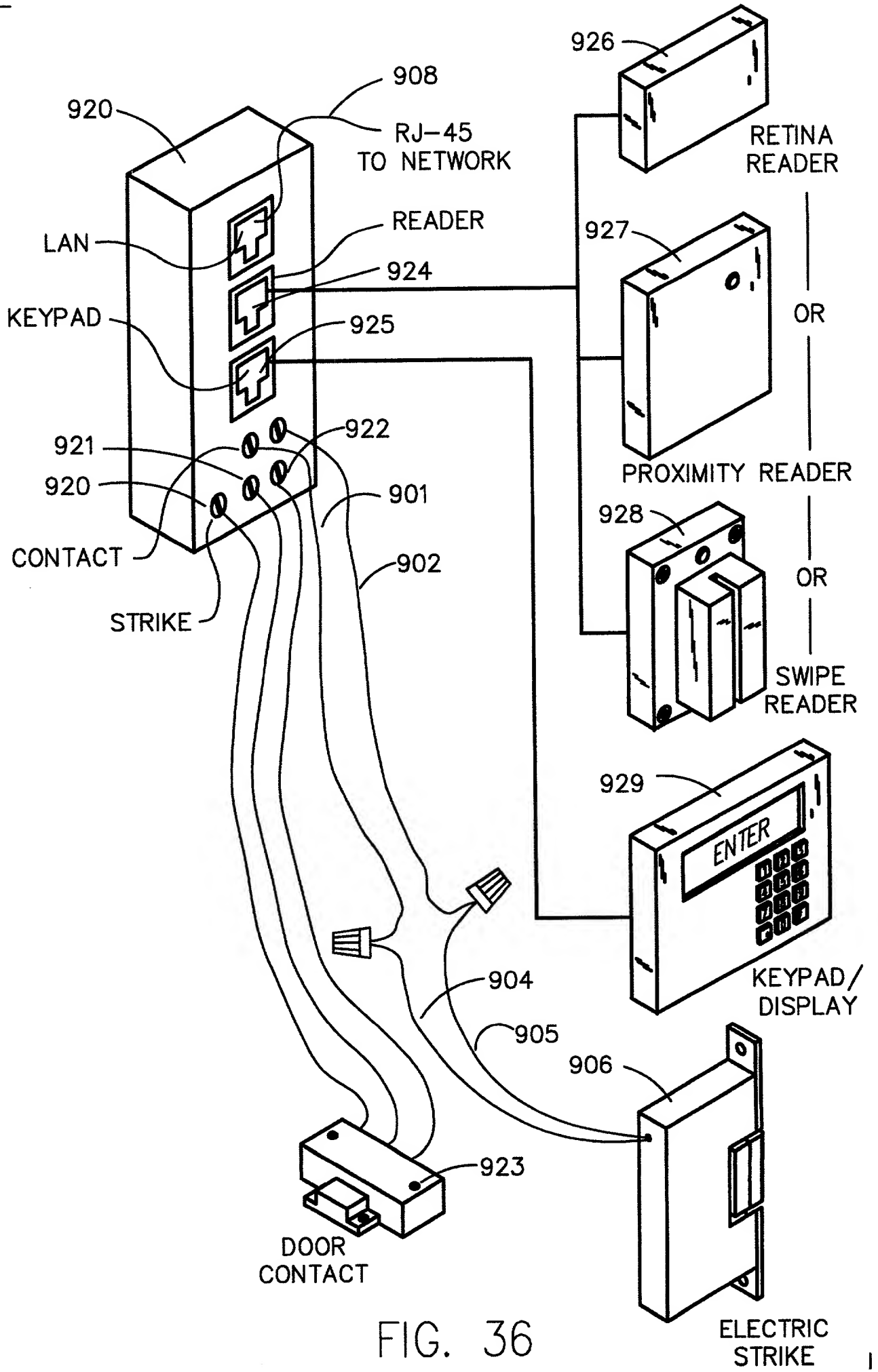

926
908
920
RJ-45
TO NETWORK
RETINA
READER
READER
LAN
927
924
KEYPAD
925
OR
921
922
920
901
PROXIMITY READER
928
CONTACT
902
OR
STRIKE
SWIPE
READER
929
ENTER
904
KEYPAD/
DISPLAY
905
906
923
DOOR
CONTACT
ELECTRIC
STRIKE

FIG. 36

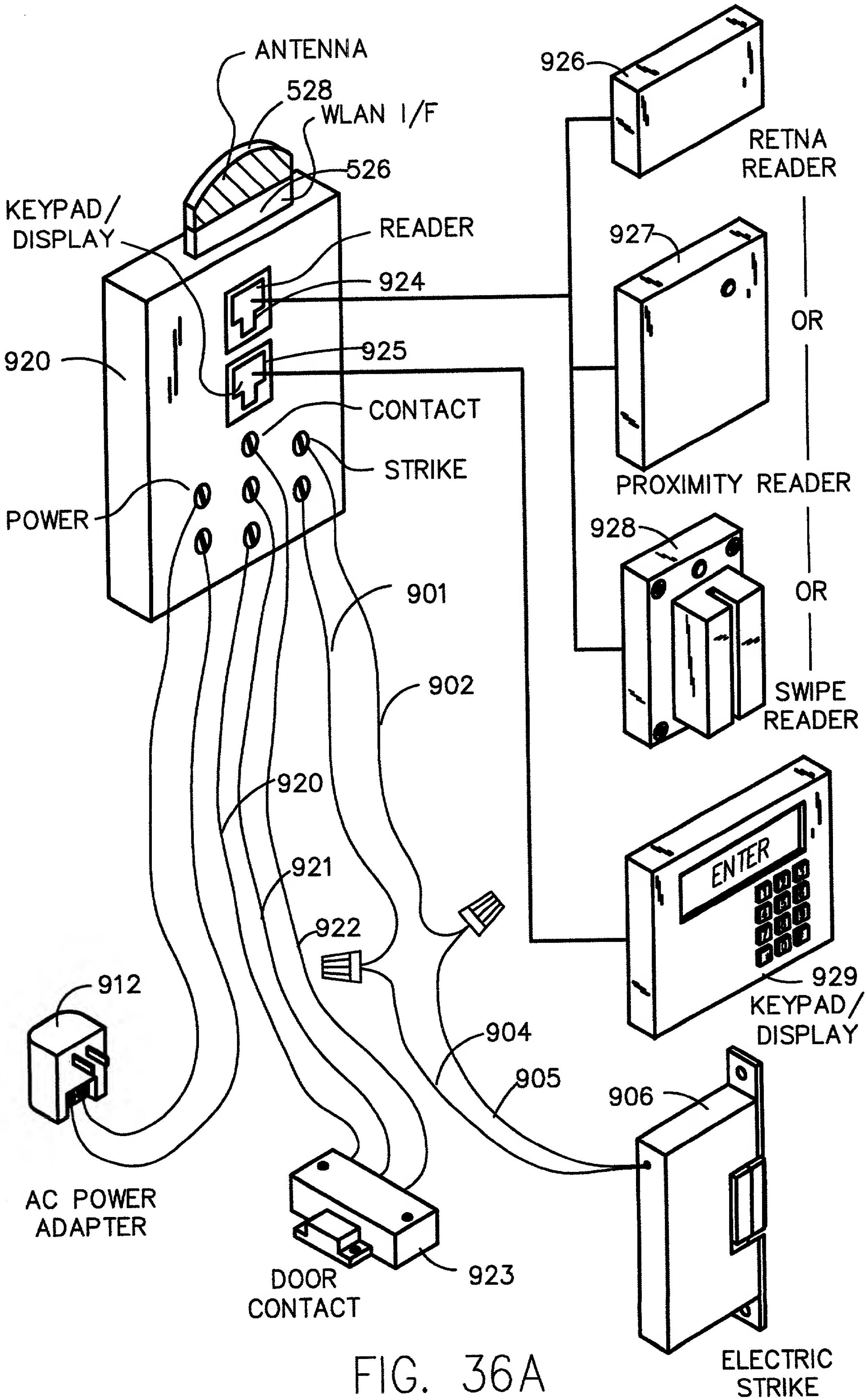

ANTENNA
528
WLAN I/F
526
KEYPAD/
DISPLAY
READER
924
920
925
CONTACT
STRIKE
POWER
901
902
920
921
922
912
904
905
906
AC POWER
ADAPTER
DOOR
CONTACT
923
926
RETNA
READER
927
OR
PROXIMITY READER
928
OR
SWIPE
READER
ENTER
929
KEYPAD/
DISPLAY
ELECTRIC
STRIKE

FIG. 36A

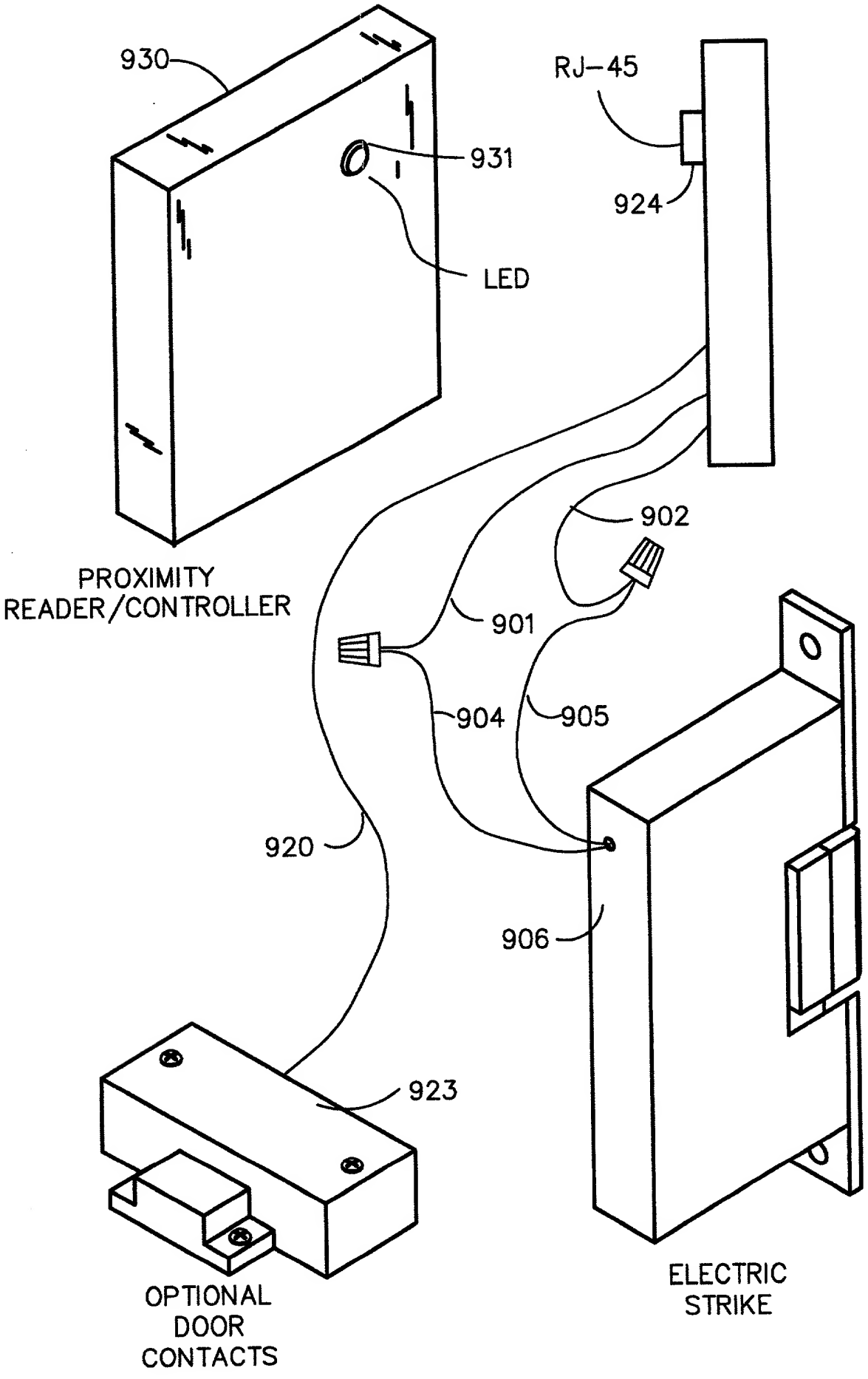

930
931
LED
RJ-45
924
902
901
904
905
920
906
923
PROXIMITY
READER/CONTROLLER
OPTIONAL
DOOR
CONTACTS
ELECTRIC
STRIKE

FIG. 37

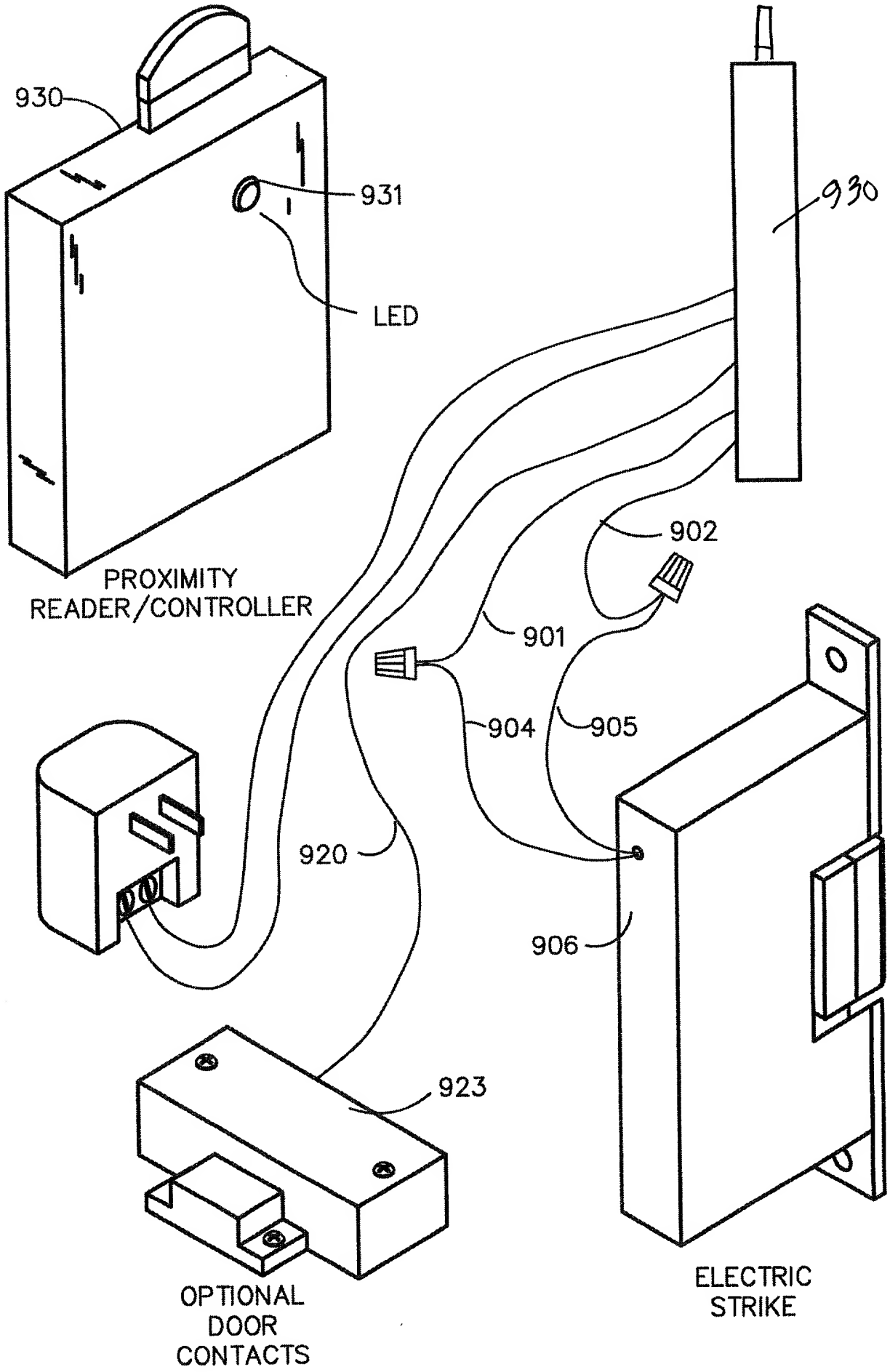

930
931
LED
PROXIMITY
READER/CONTROLLER
930
902
901
904
905
920
906
923
OPTIONAL
DOOR
CONTACTS
ELECTRIC
STRIKE

FIG. 37A

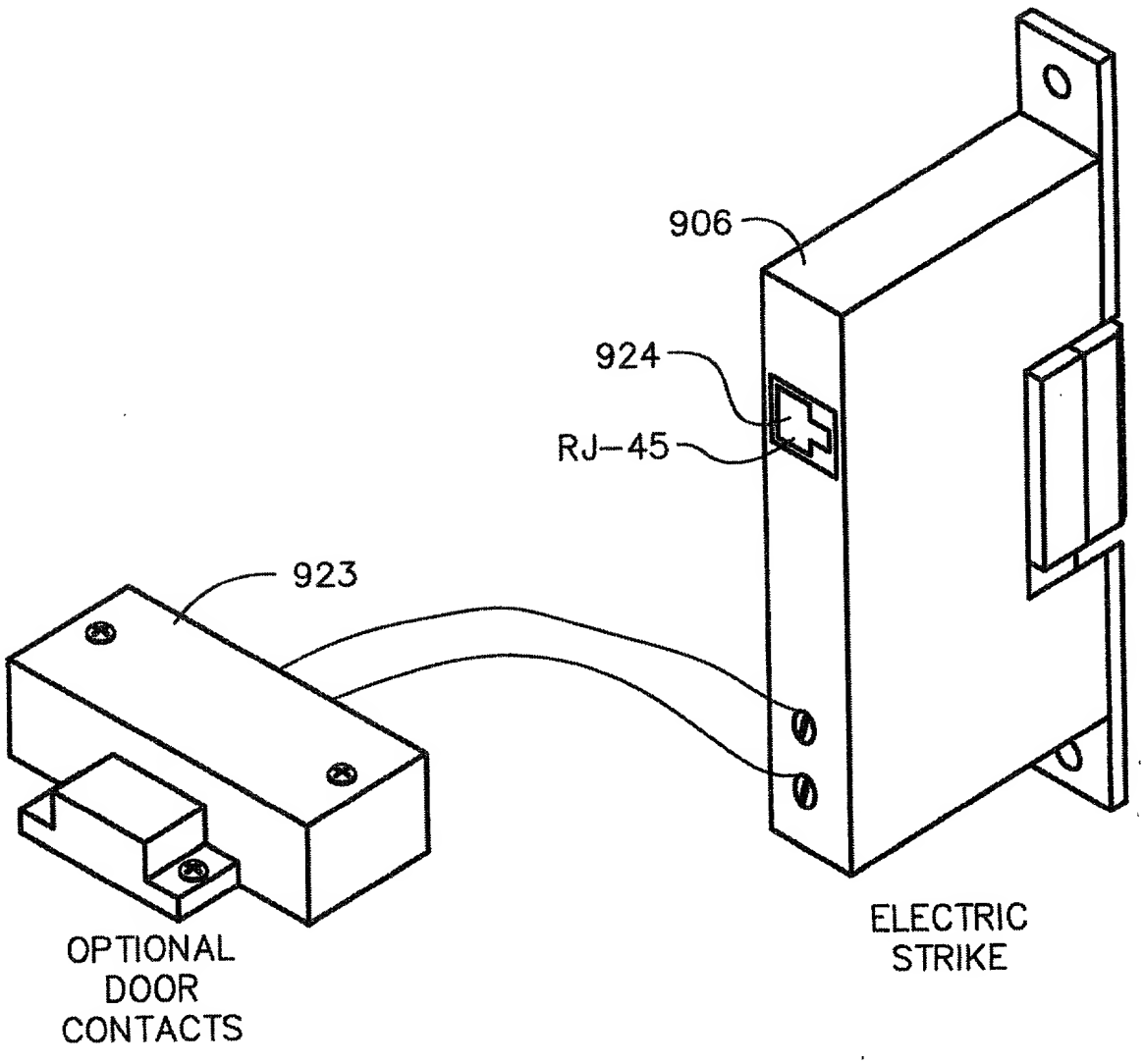


FIG. 37B

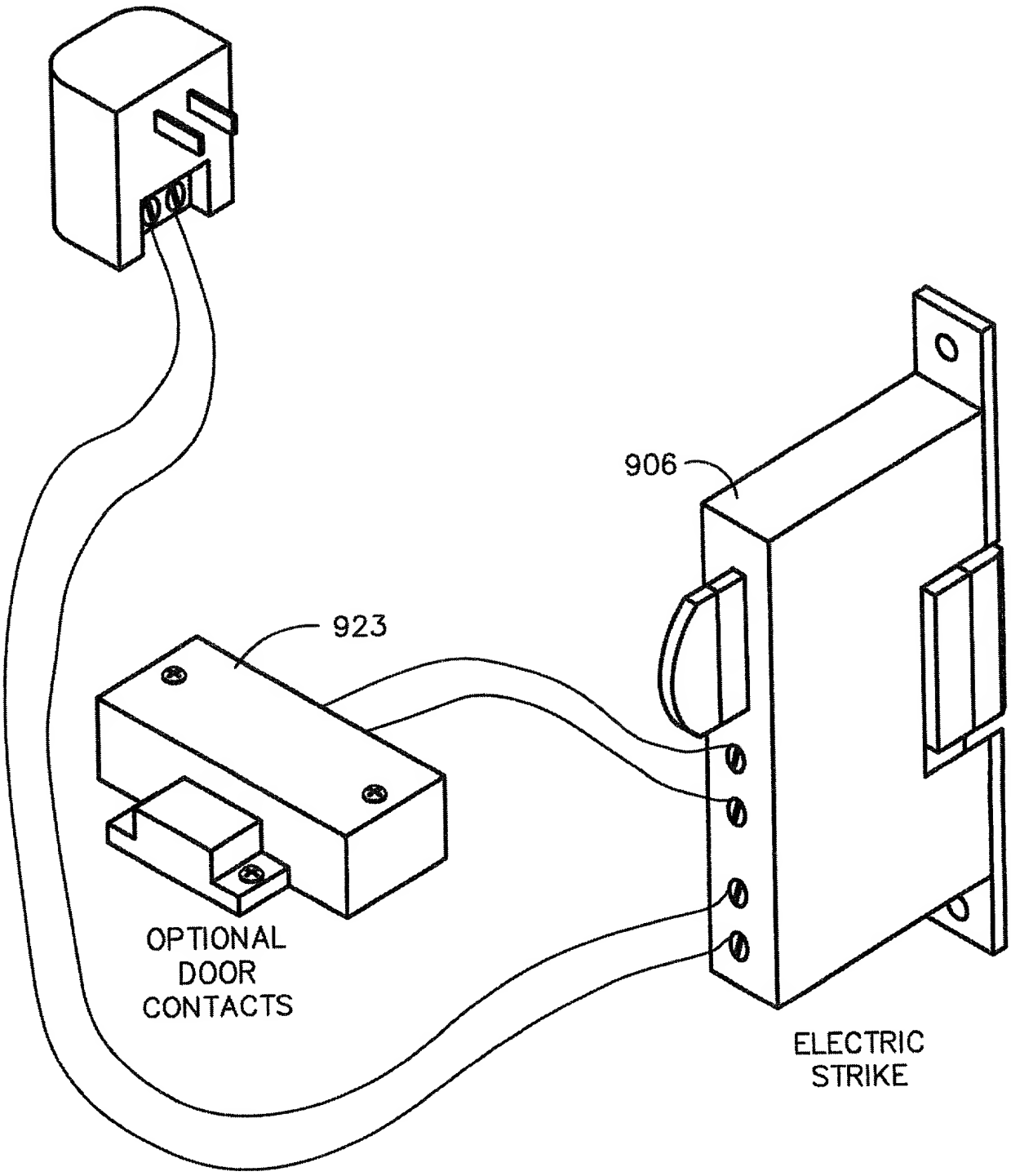


FIG. 37C

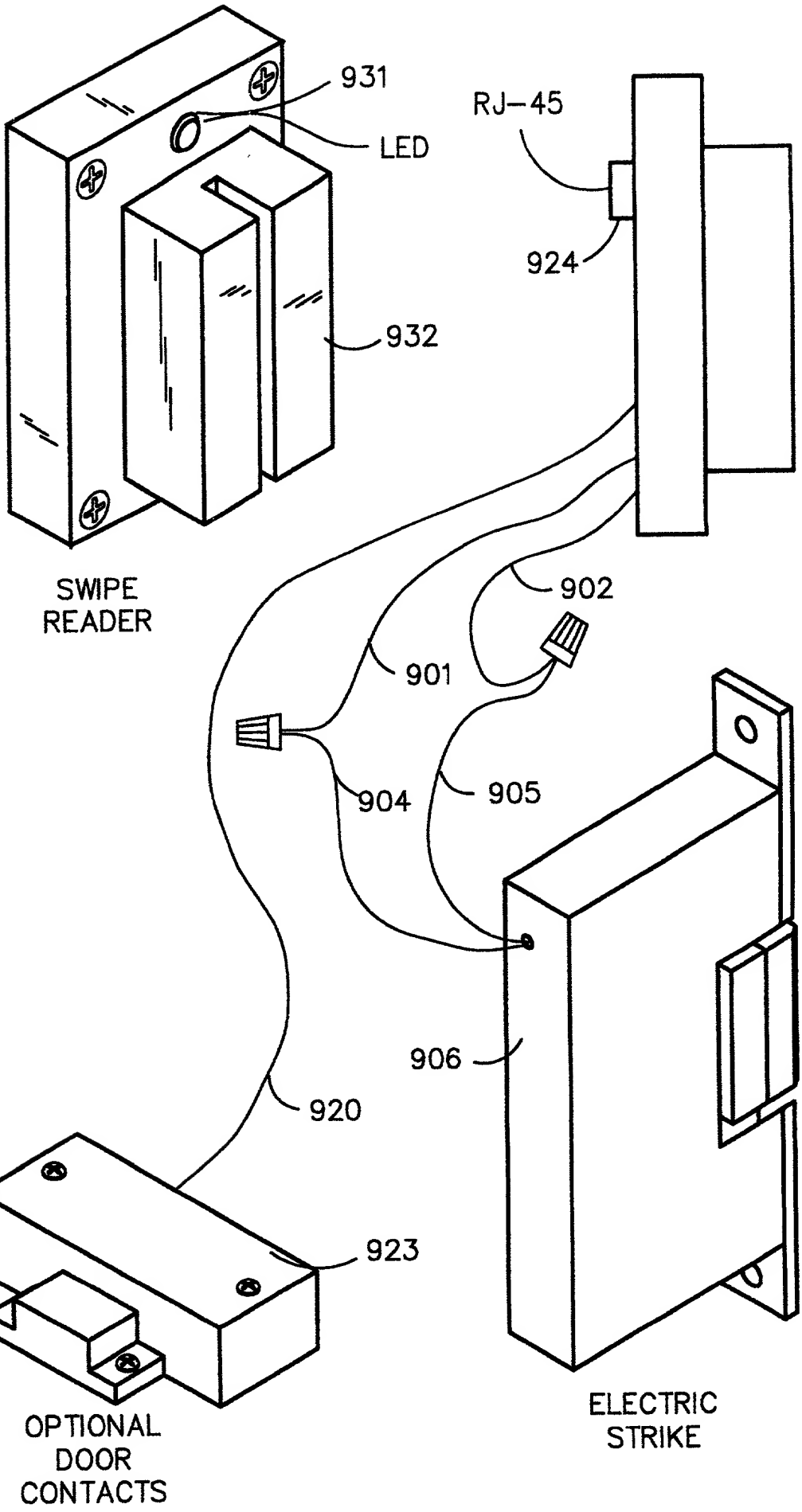

931
LED
RJ-45
924
932
SWIPE
READER
902
901
904
905
906
920
923
OPTIONAL
DOOR
CONTACTS
ELECTRIC
STRIKE

FIG. 38

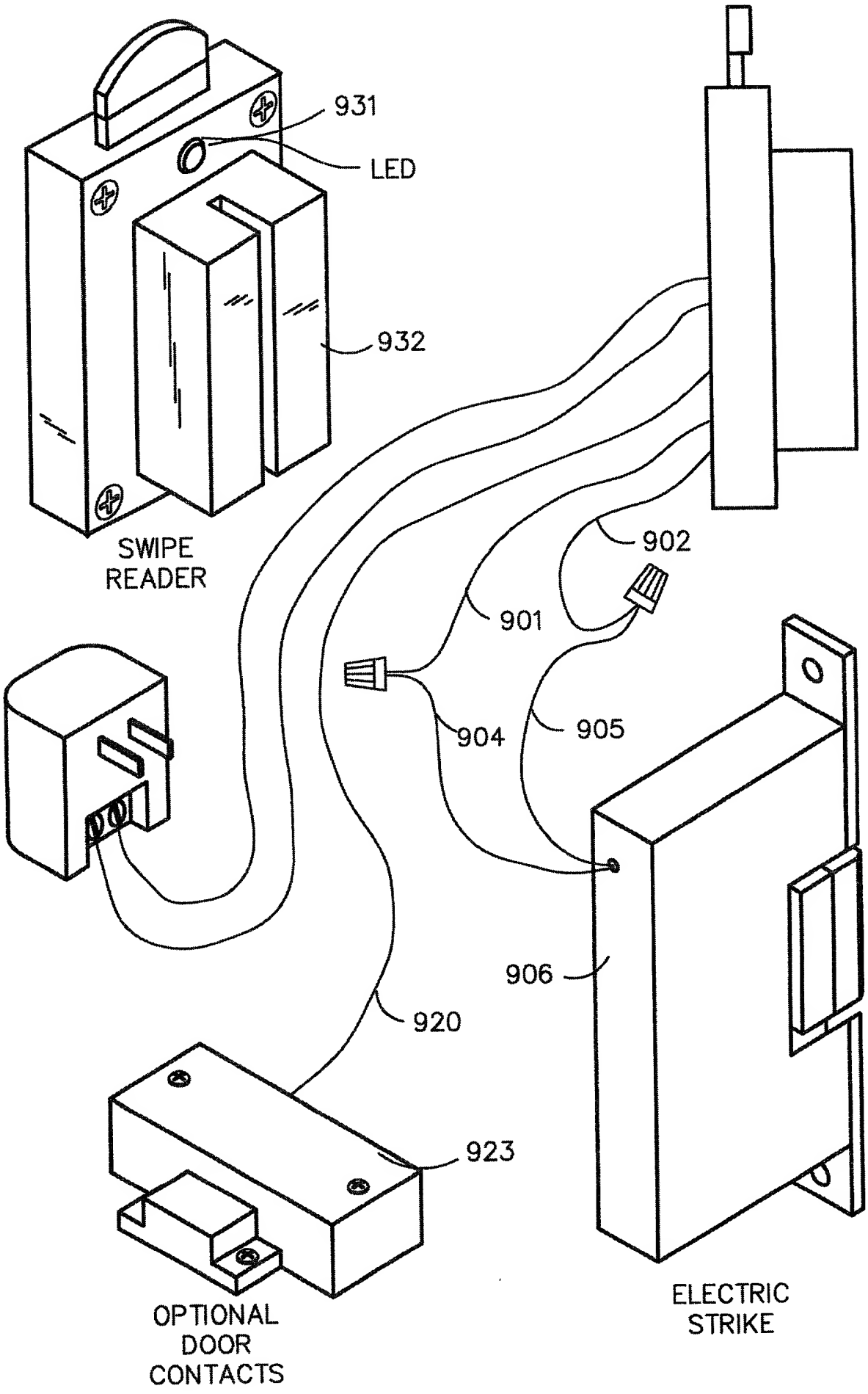

931
LED
932
SWIPE
READER
902
901
904
905
906
920
923
OPTIONAL
DOOR
CONTACTS
ELECTRIC
STRIKE

FIG. 38A

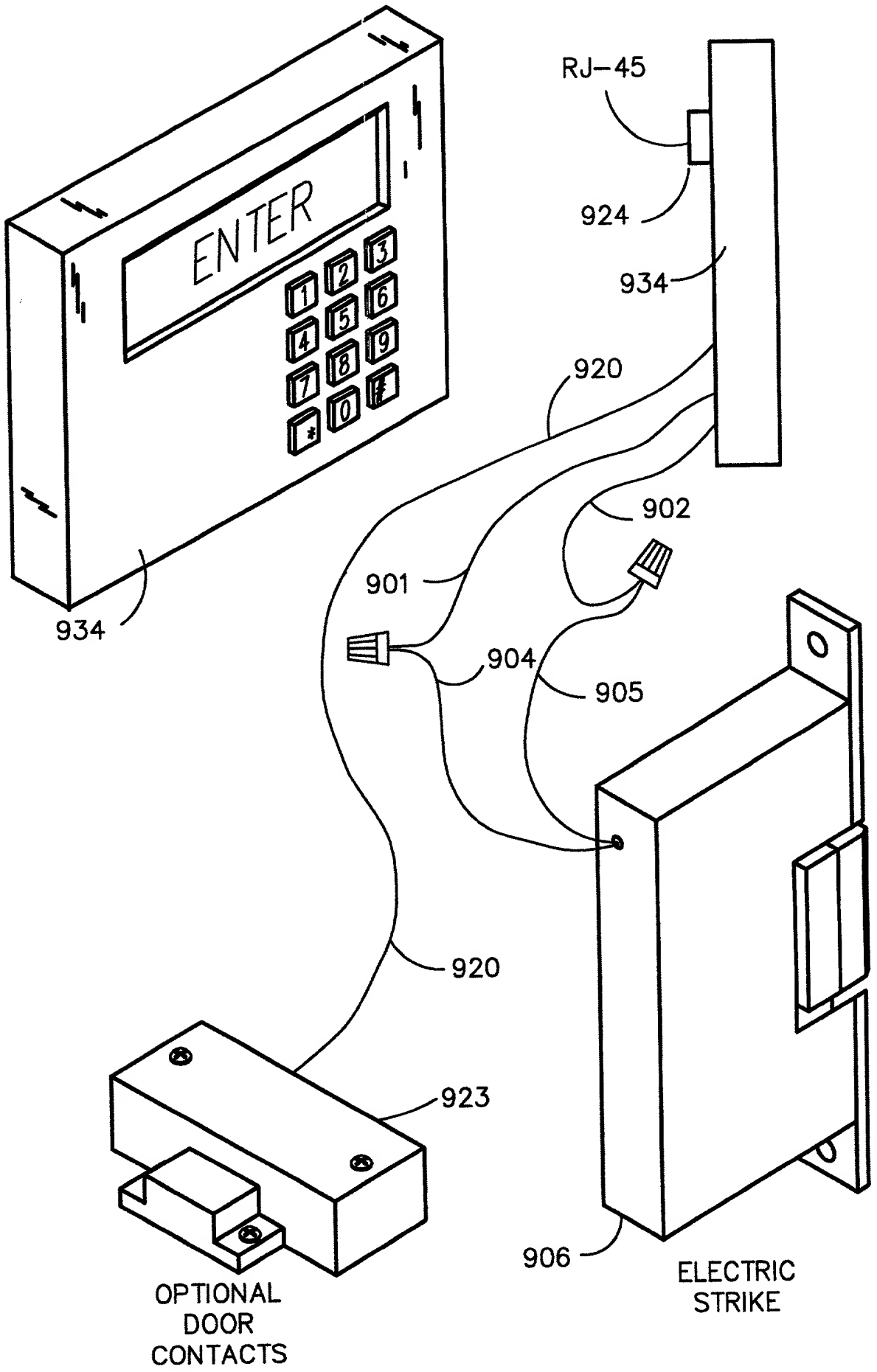

ENTER
RJ-45
924
934
920
902
901
904
905
934
920
923
906
OPTIONAL
DOOR
CONTACTS
ELECTRIC
STRIKE

FIG. 39

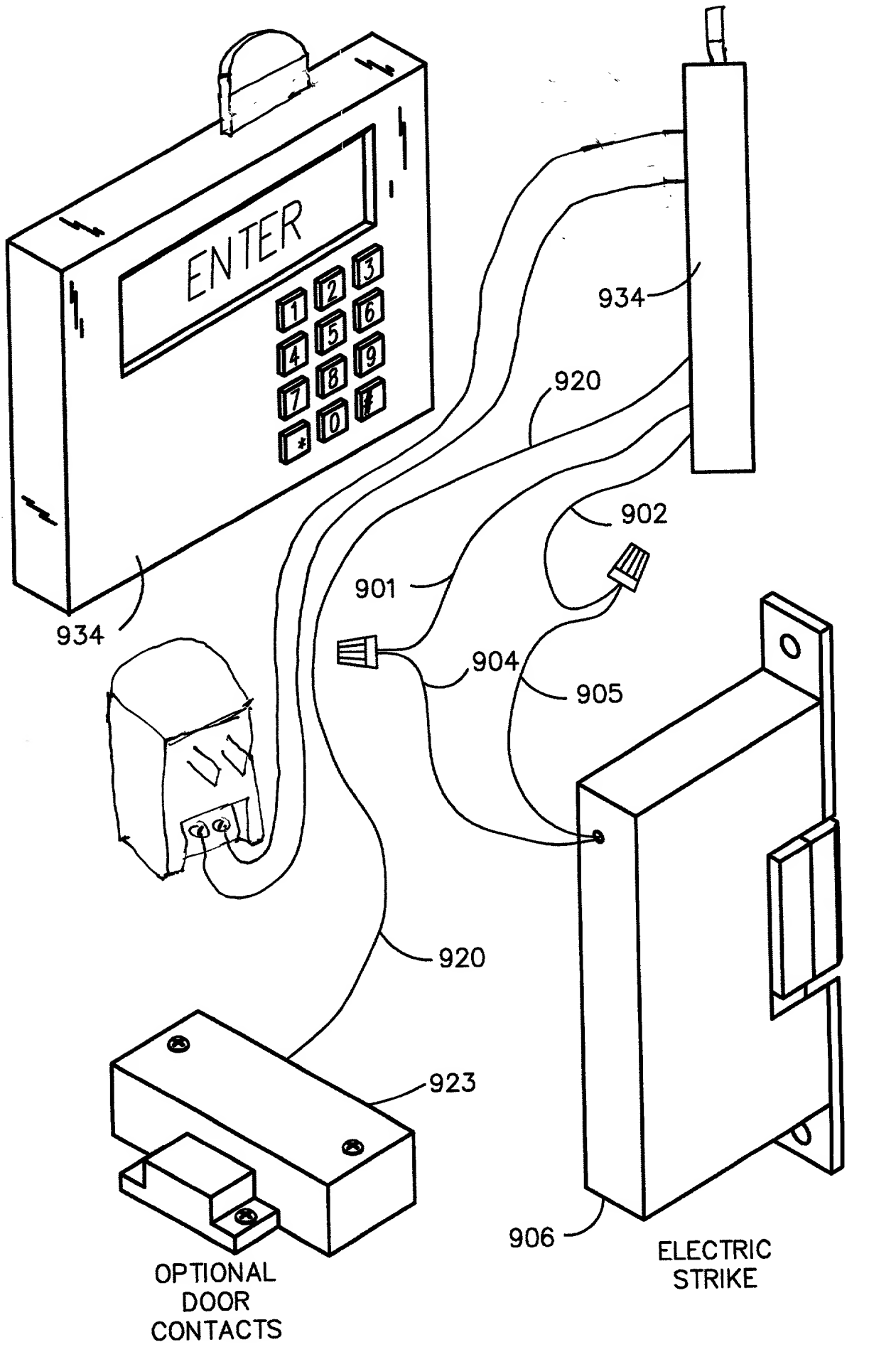

ENTER
1
2
3
4
5
6
7
8
9
*
0
#
934
920
902
901
904
905
934
920
923
906
OPTIONAL
DOOR
CONTACTS
ELECTRIC
STRIKE

FIG. 39A

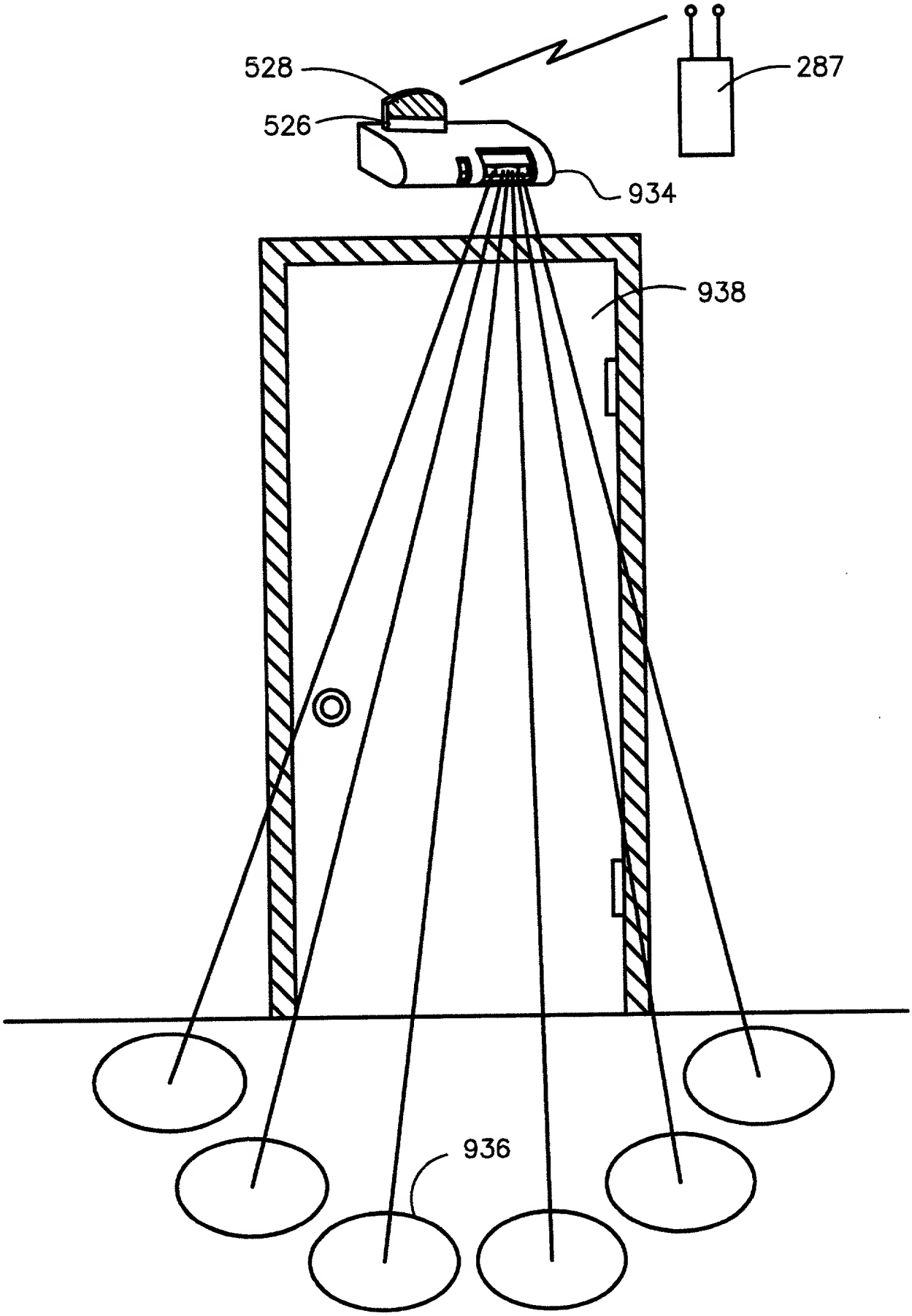
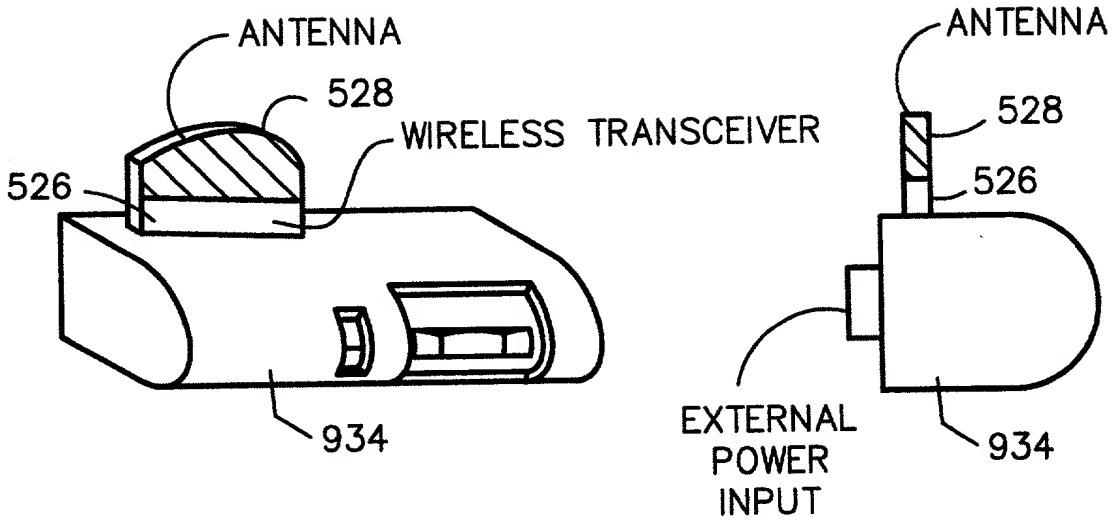
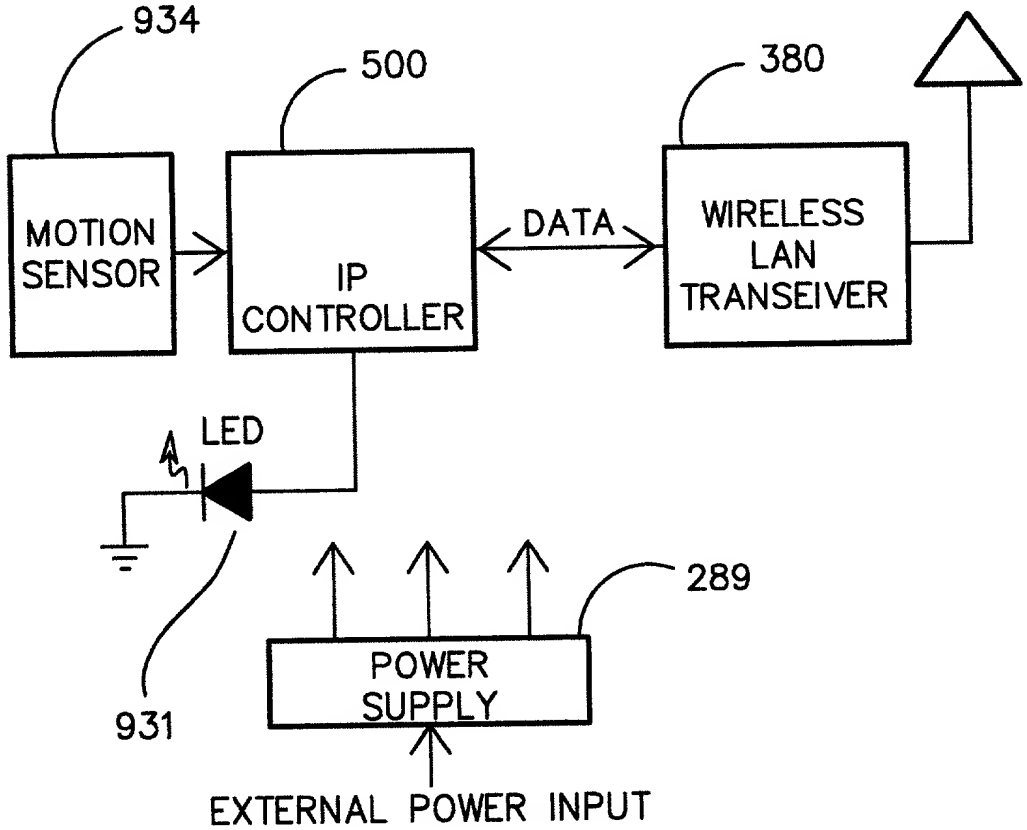


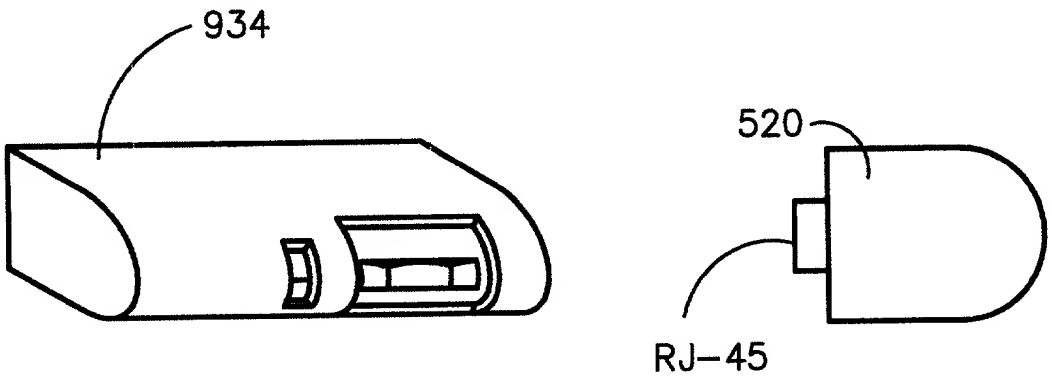
FIG. 40





WIRELESS EXIT SENSOR

FIG. 40A


934
520
RJ–45

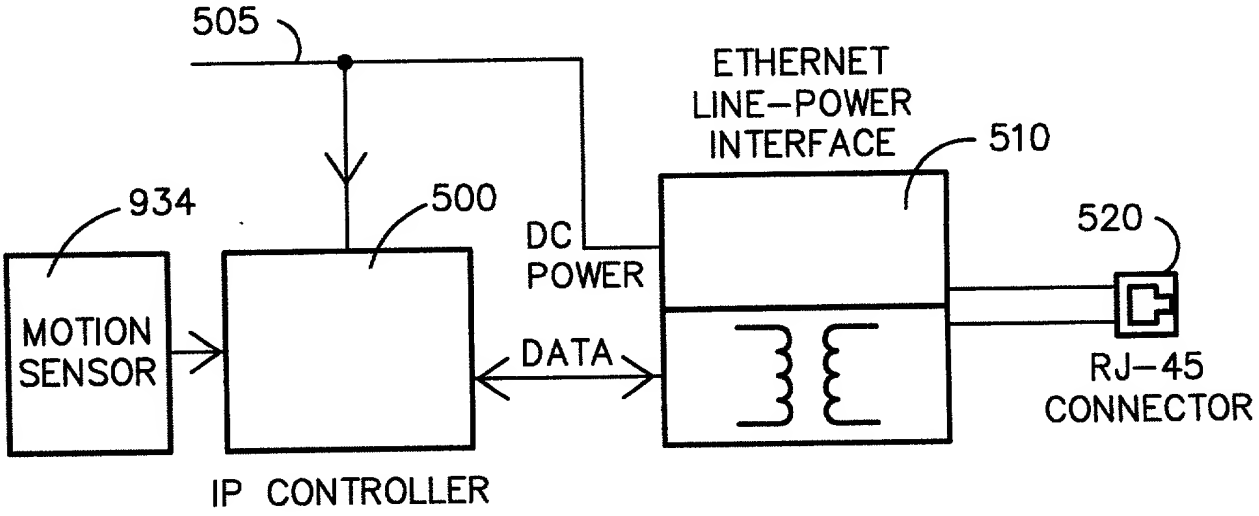

505
ETHERNET
LINE–POWER
INTERFACE
510
934
500
520
DC
POWER
MOTION
SENSOR
DATA
RJ–45
CONNECTOR
IP CONTROLLER

FIG. 40B

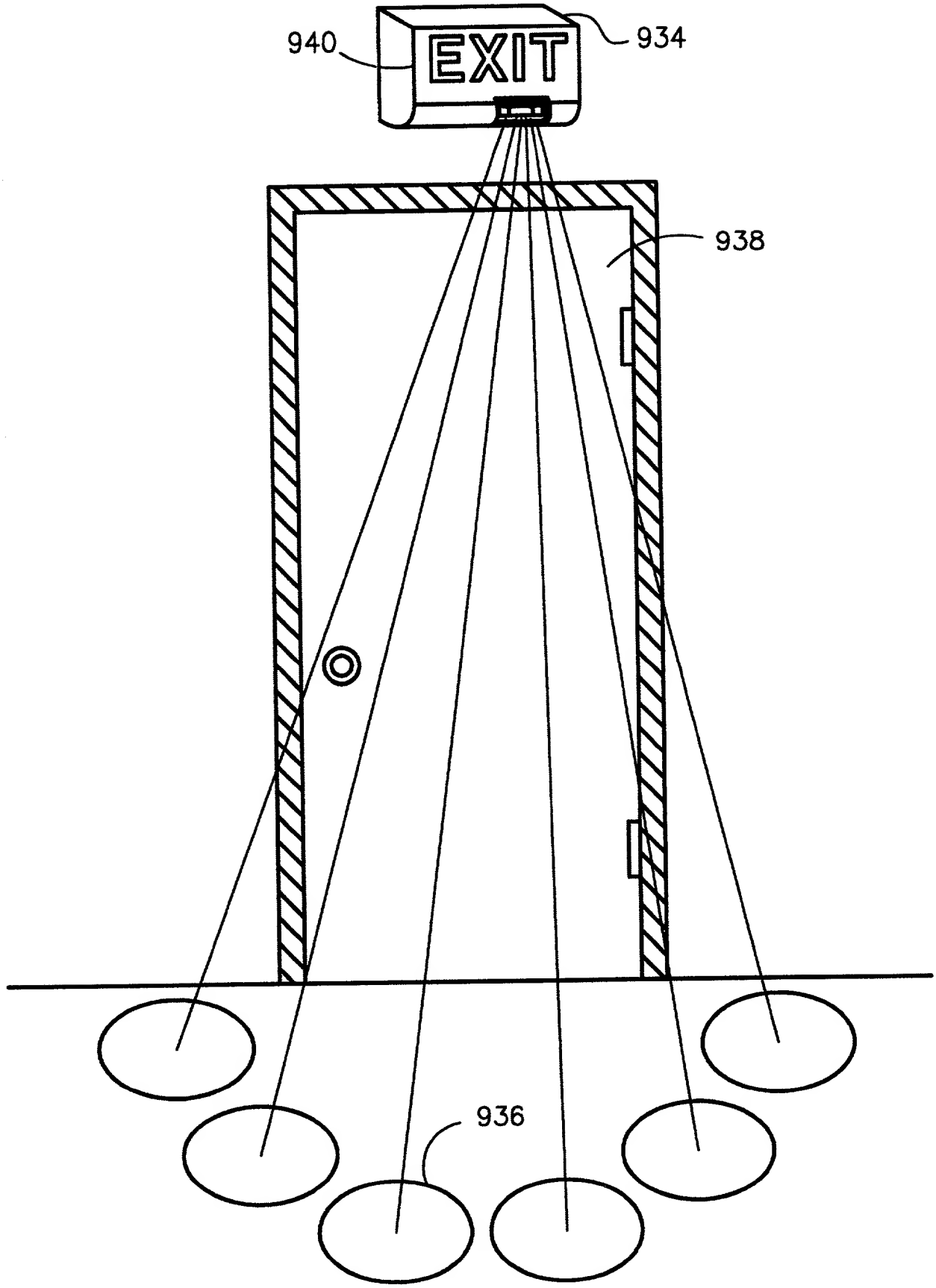
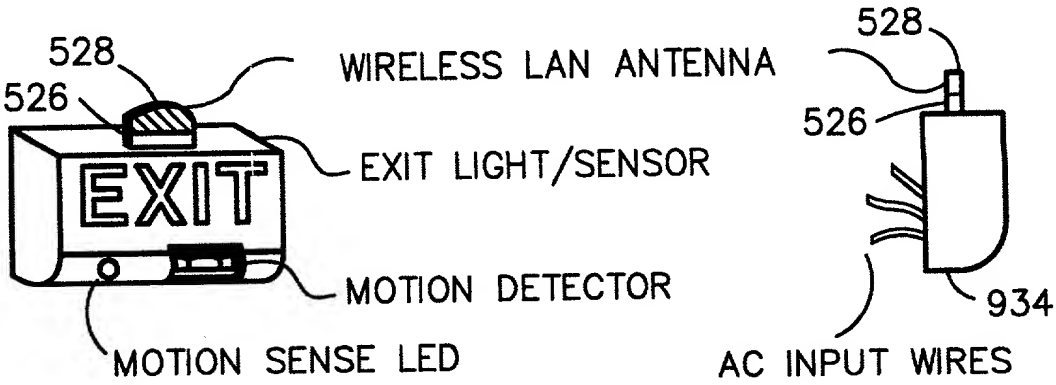


FIG. 40C


528
526
WIRELESS LAN ANTENNA
EXIT
EXIT LIGHT/SENSOR
MOTION DETECTOR
MOTION SENSE LED
528
526
934
AC INPUT WIRES

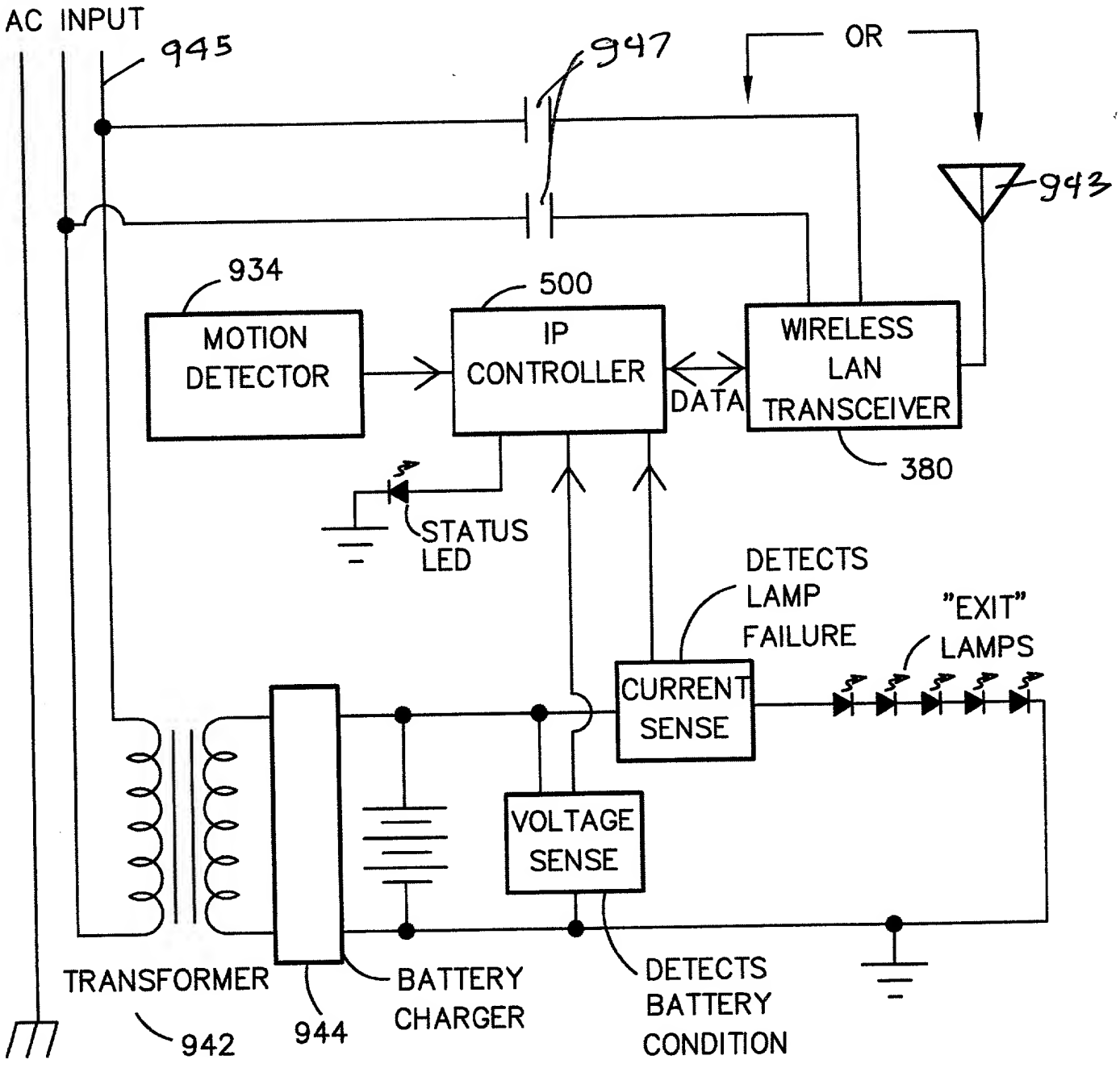

AC INPUT
945
947
OR
943
934
MOTION DETECTOR
500
IP CONTROLLER
DATA
WIRELESS LAN TRANSCEIVER
380
STATUS LED
DETECTS LAMP FAILURE
"EXIT" LAMPS
CURRENT SENSE
VOLTAGE SENSE
TRANSFORMER
942
944
BATTERY CHARGER
DETECTS BATTERY CONDITION

FIG. 40A-D

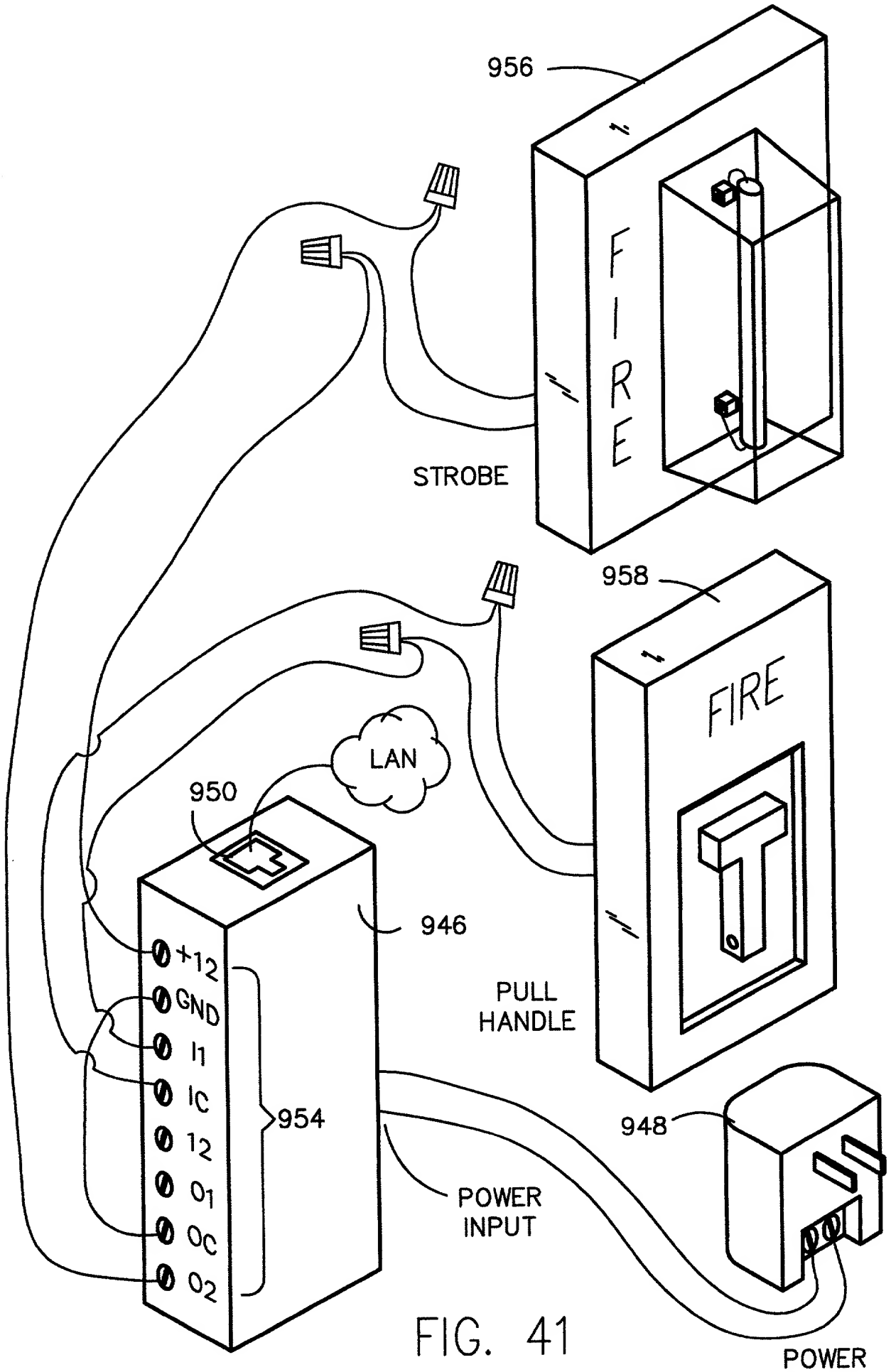


FIG. 41

WIRED UNIVERSAL INTERFACE–
PULL HANDLE/STROBE APPLICATION

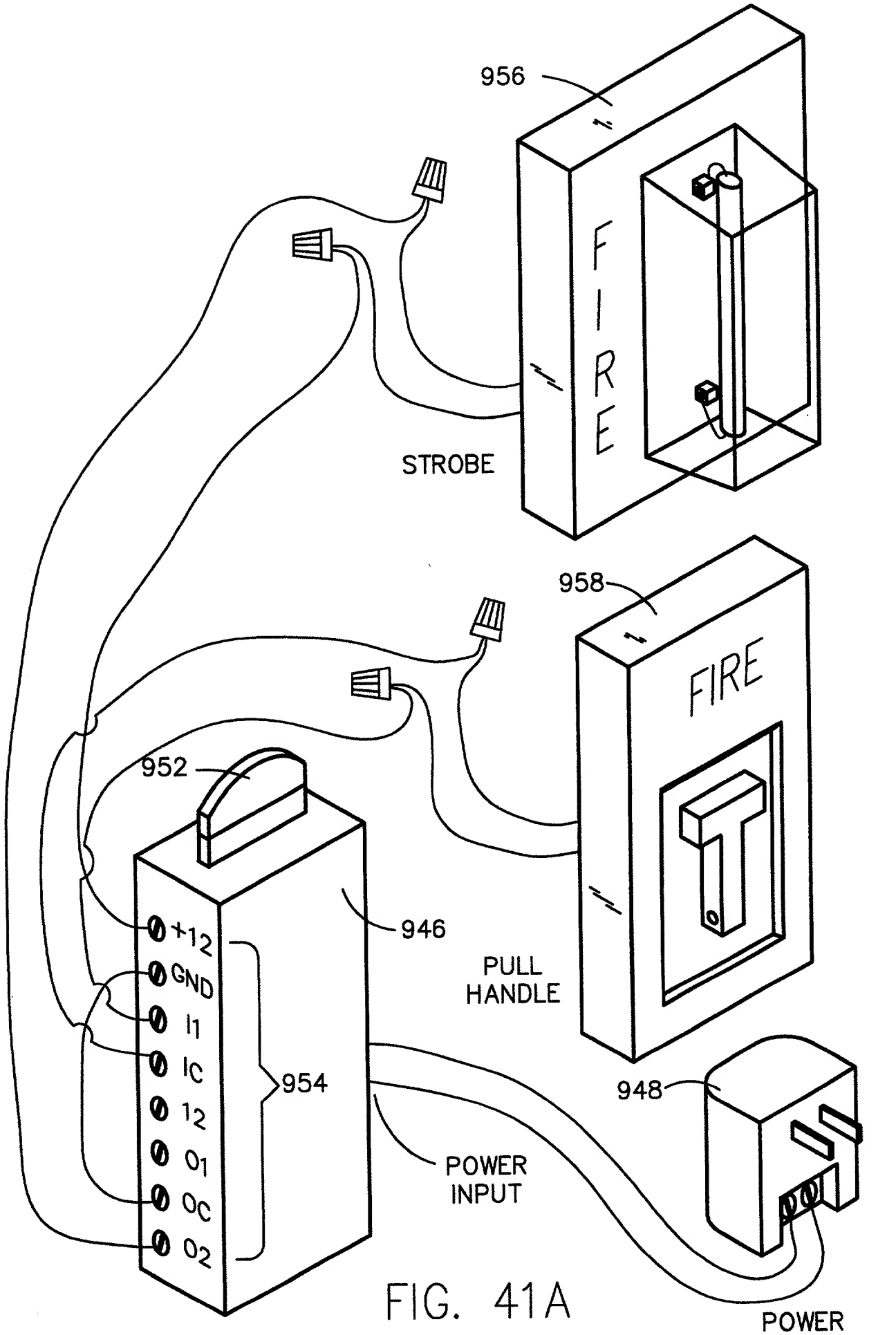
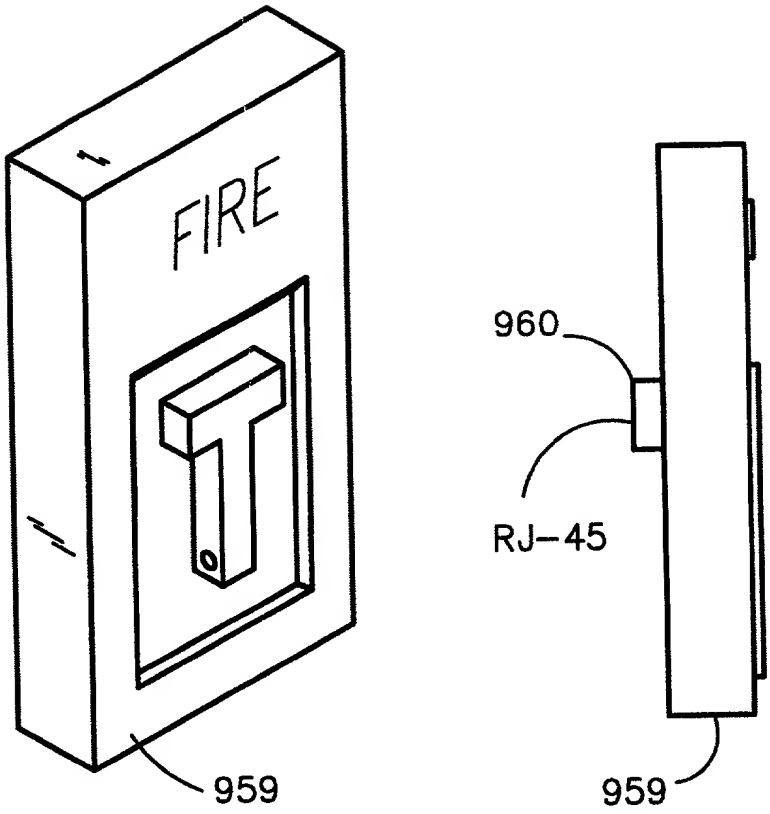


FIG. 41A

WIRELESS UNIVERSAL INTERFACE–
PULL HANDLE/STROBE APPLICATION



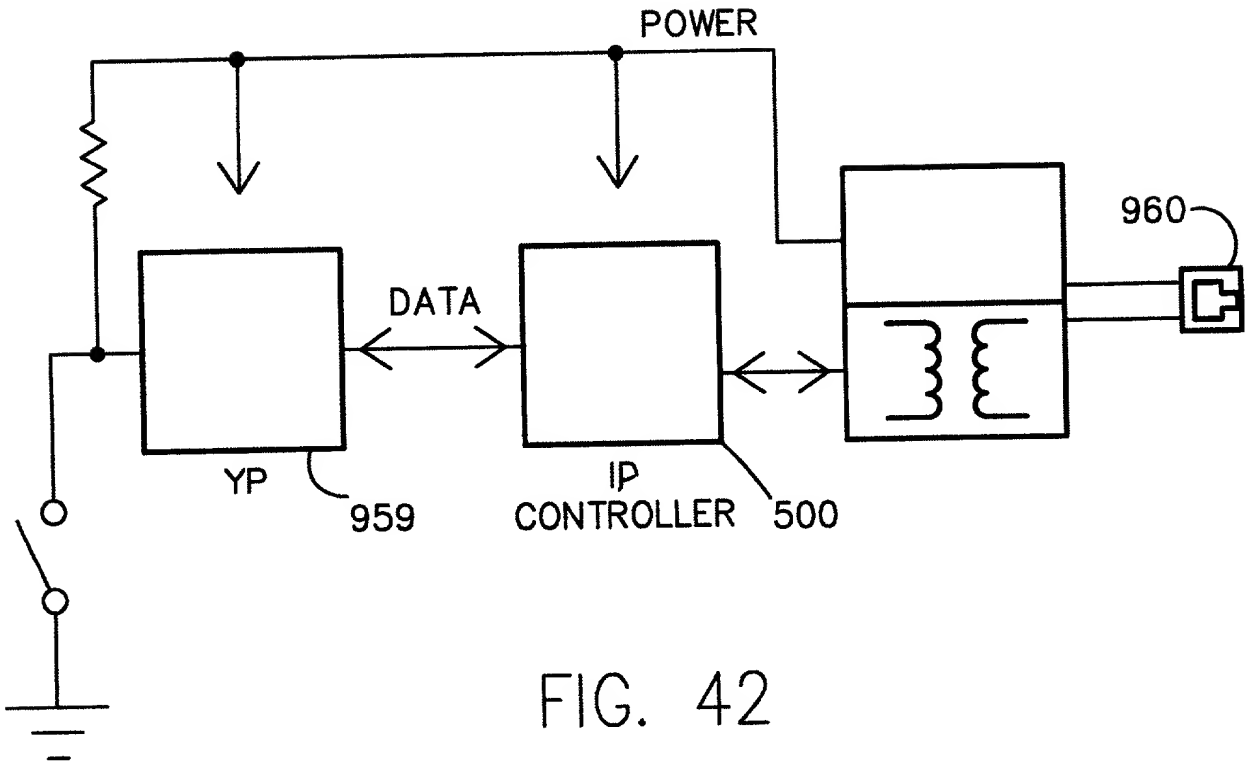
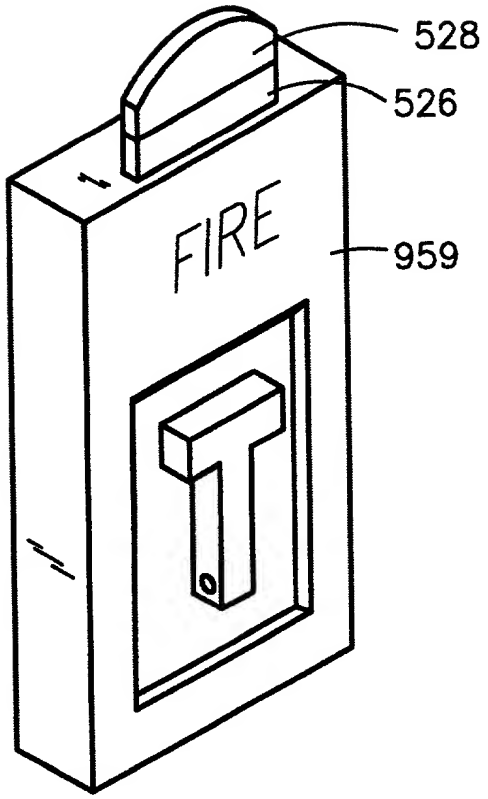
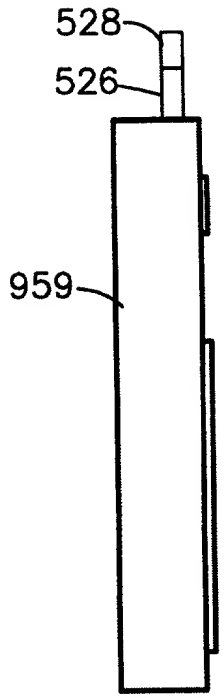


FIG. 42

WIRED PULL HANDLE





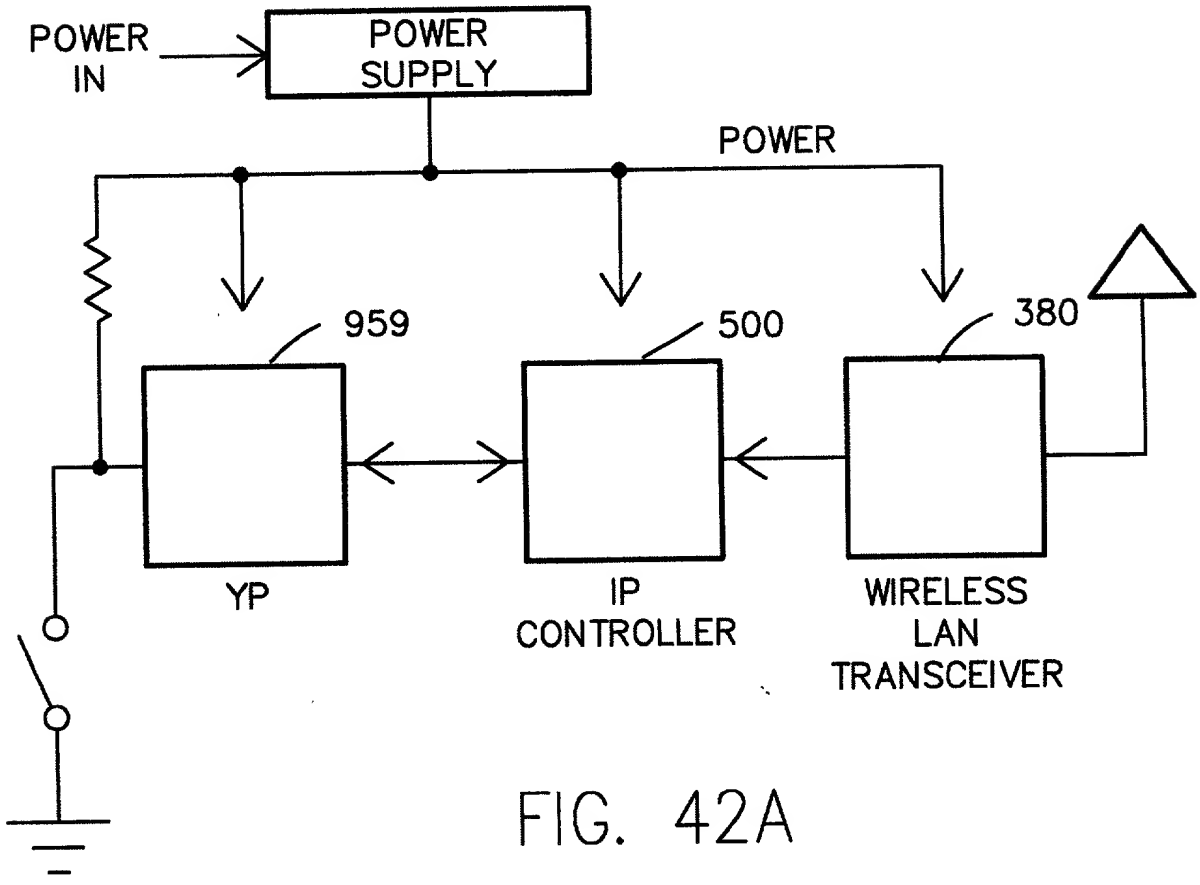
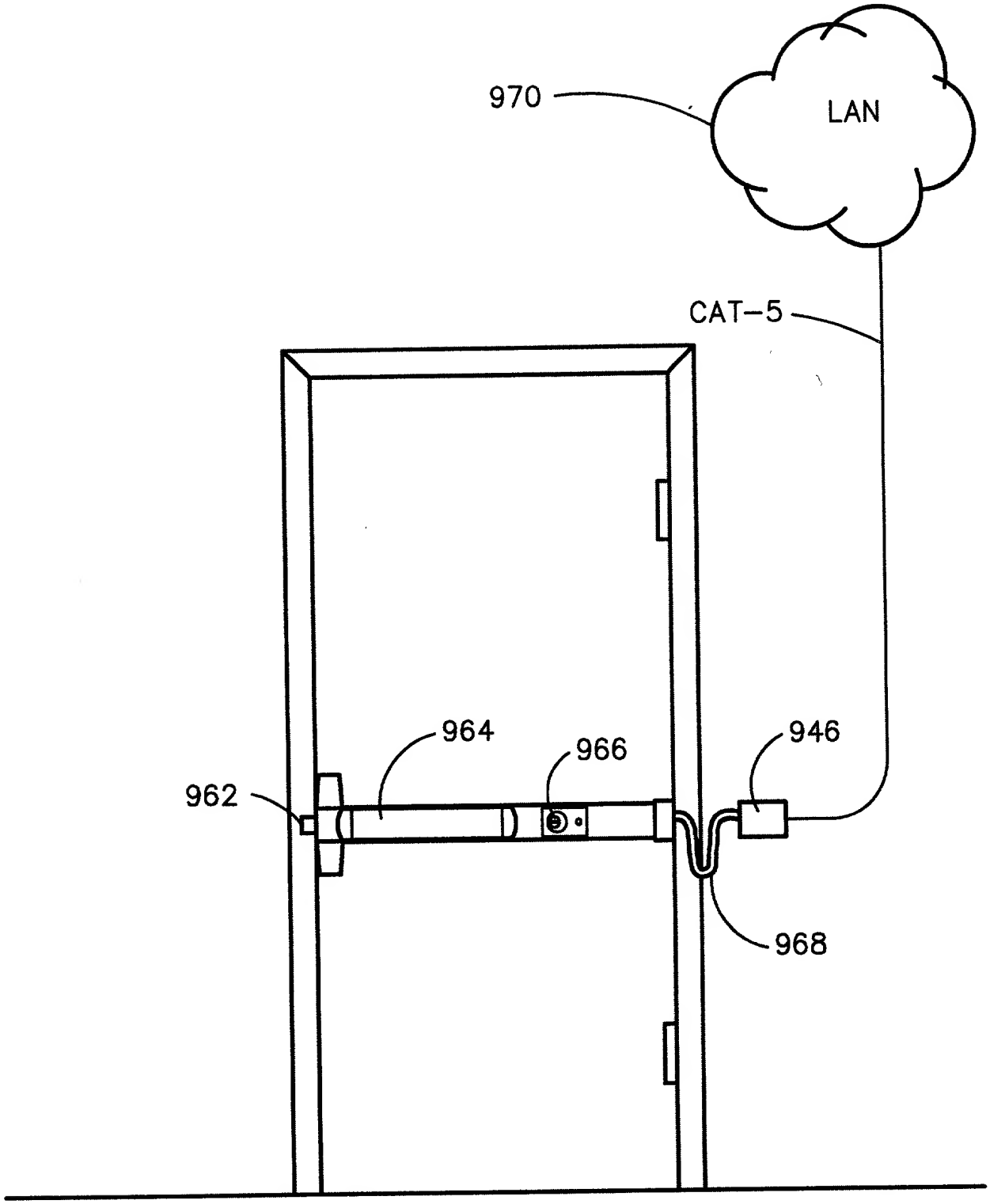


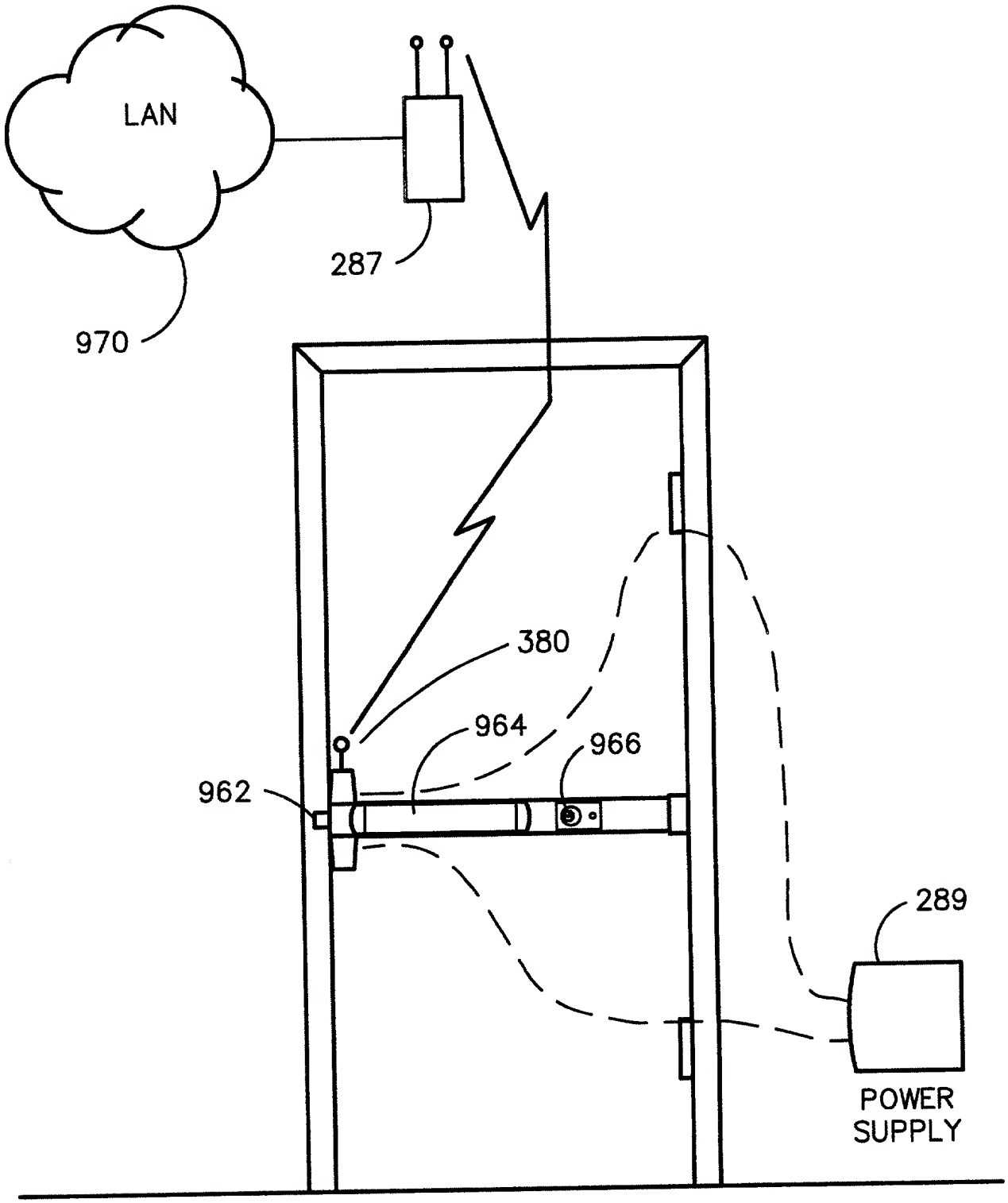
FIG. 42A

WIRELESS PULL HANDLE



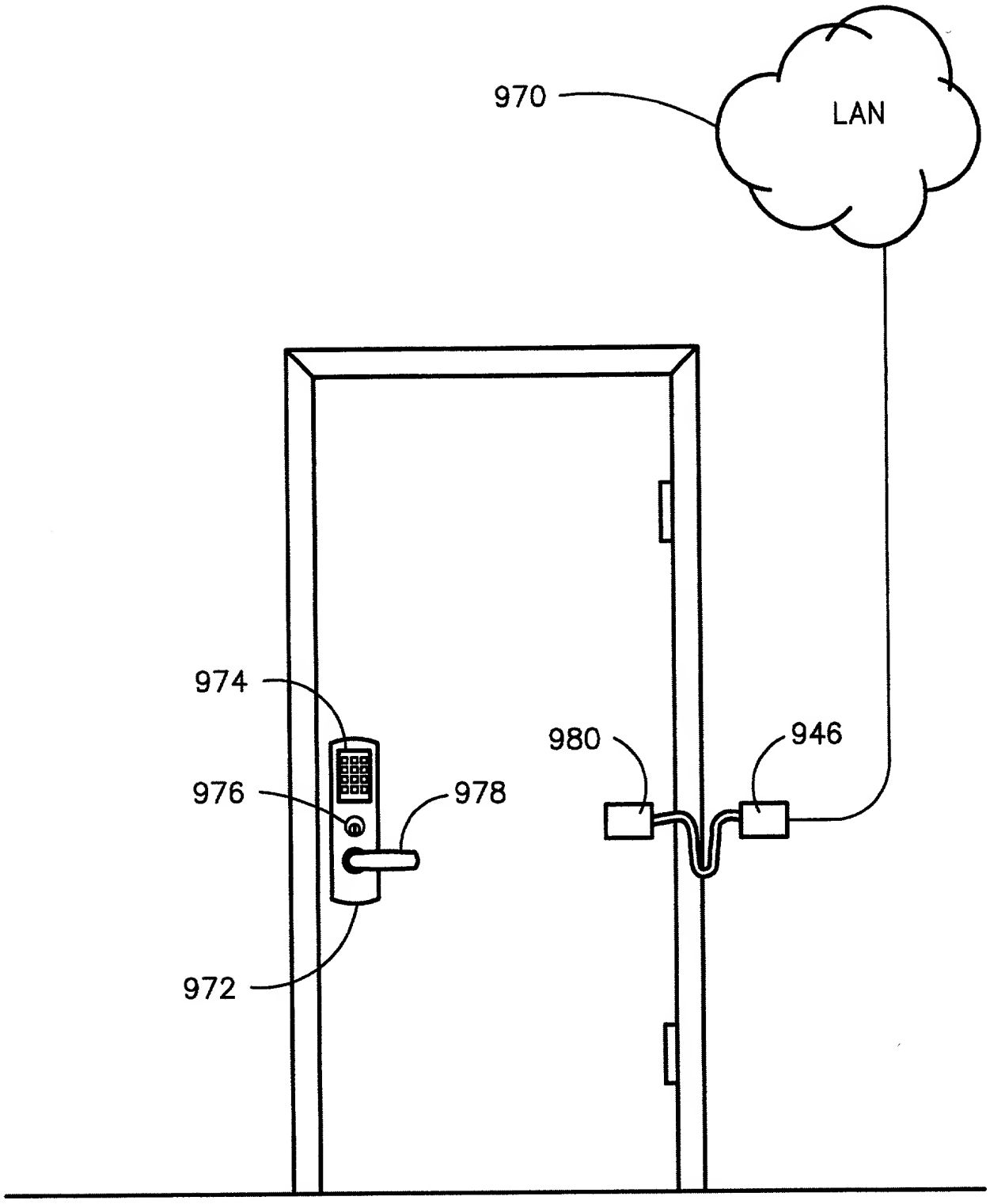
WIRED EXIT DEVICE

FIG. 43



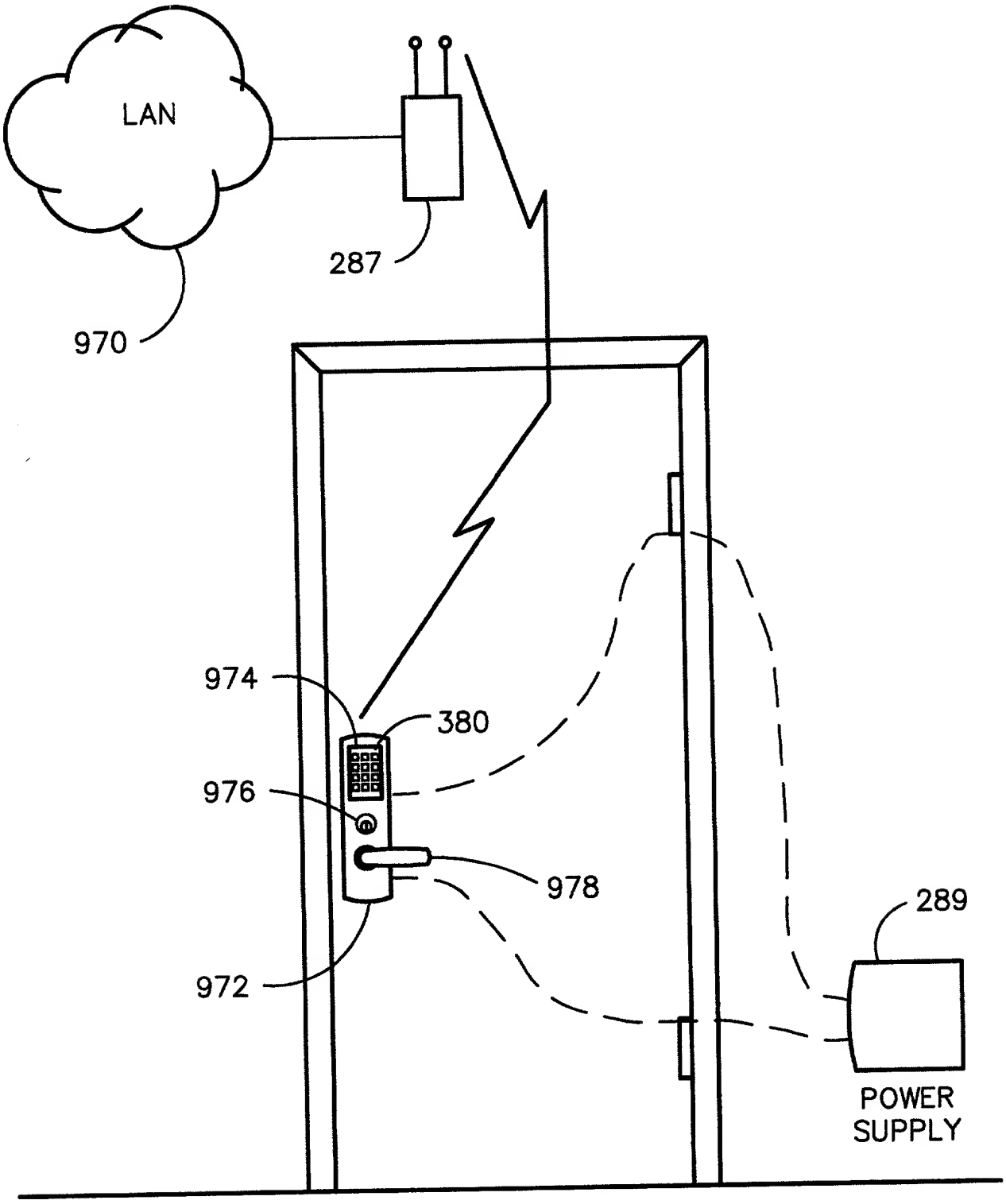
WIRELESS EXIT DEVICE

FIG. 43A



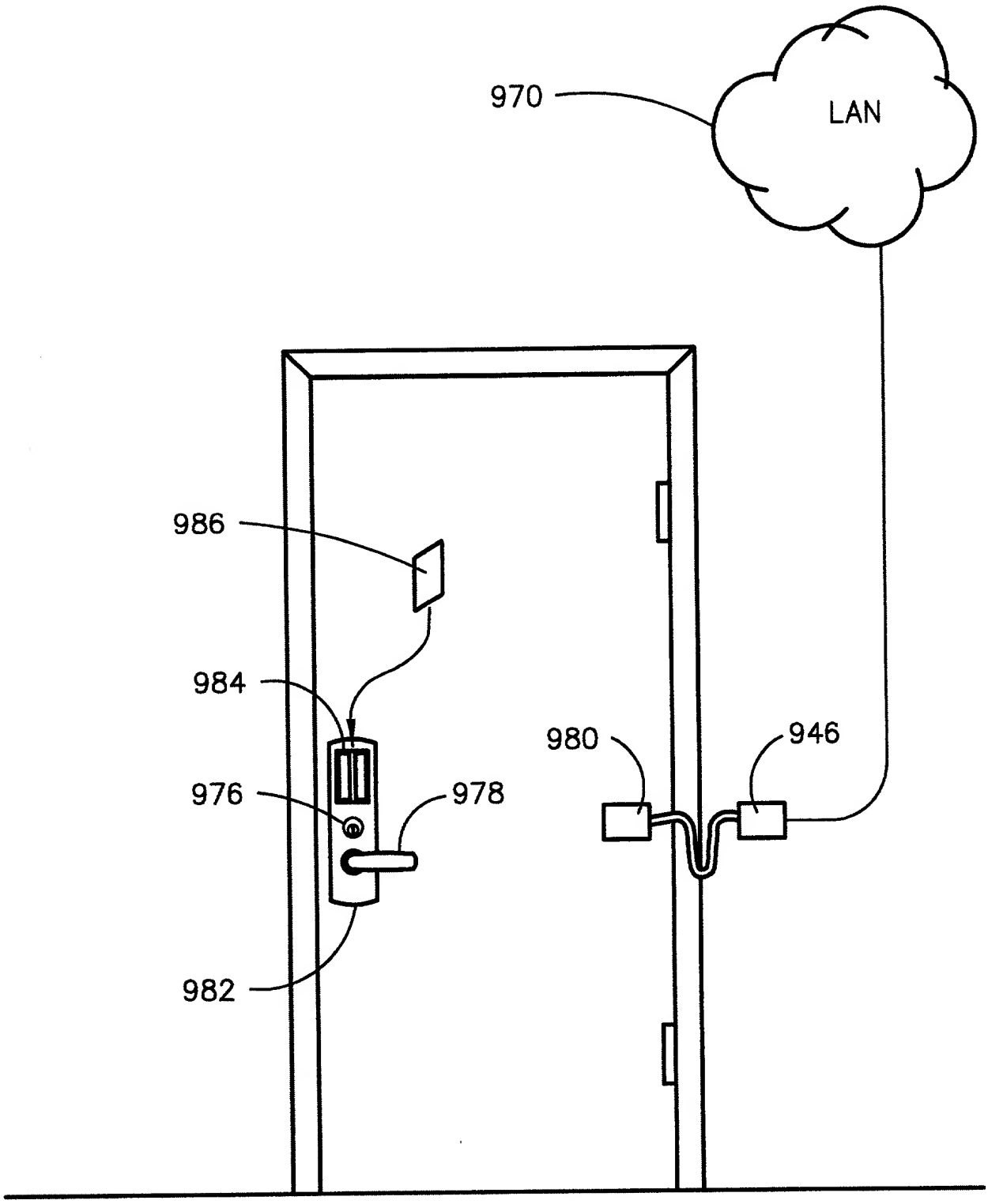
WIRED KEYPAD MORTISE LOCK

FIG. 44



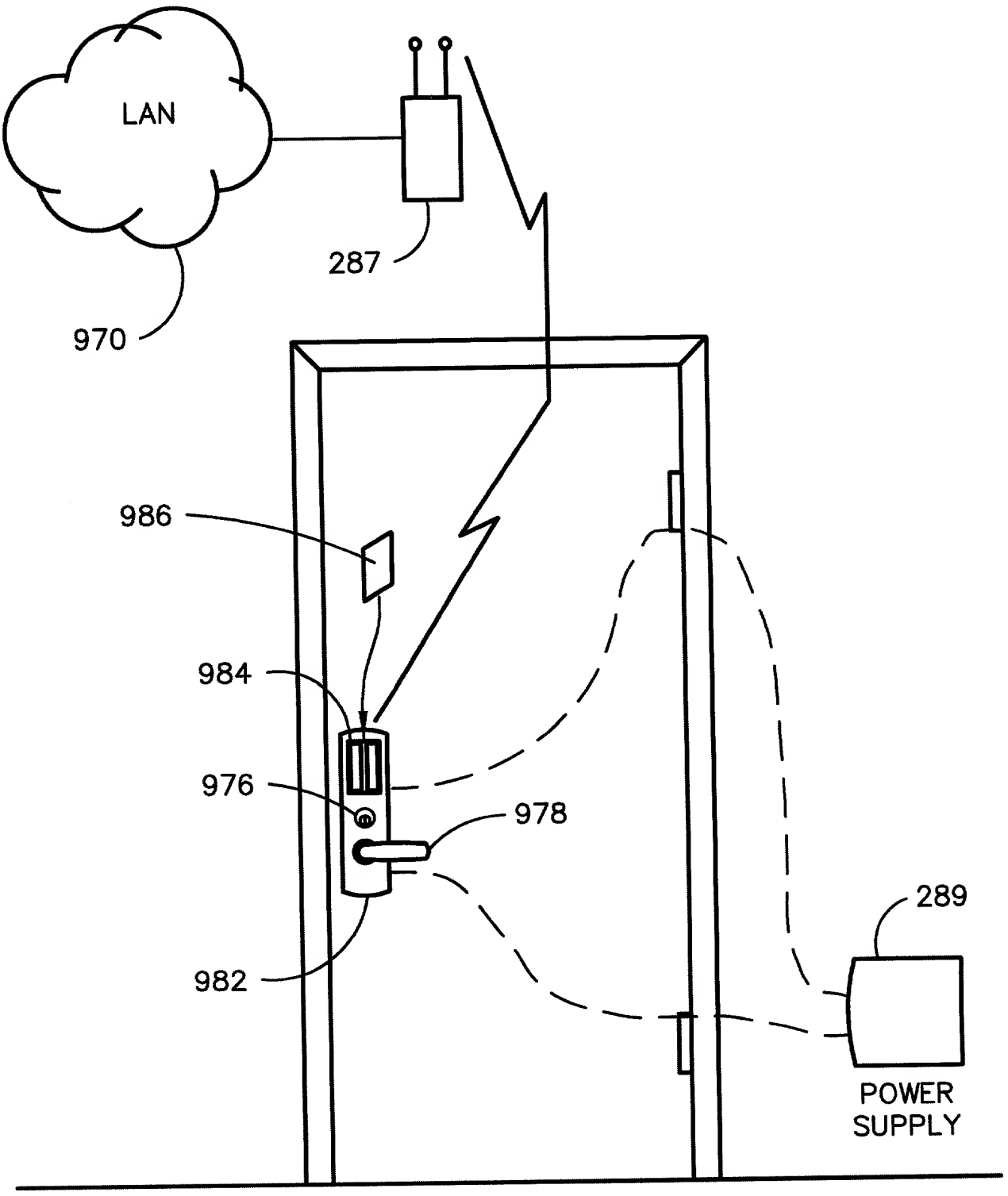
WIRELESS KEYPAD MORTISE LOCK

FIG. 44A



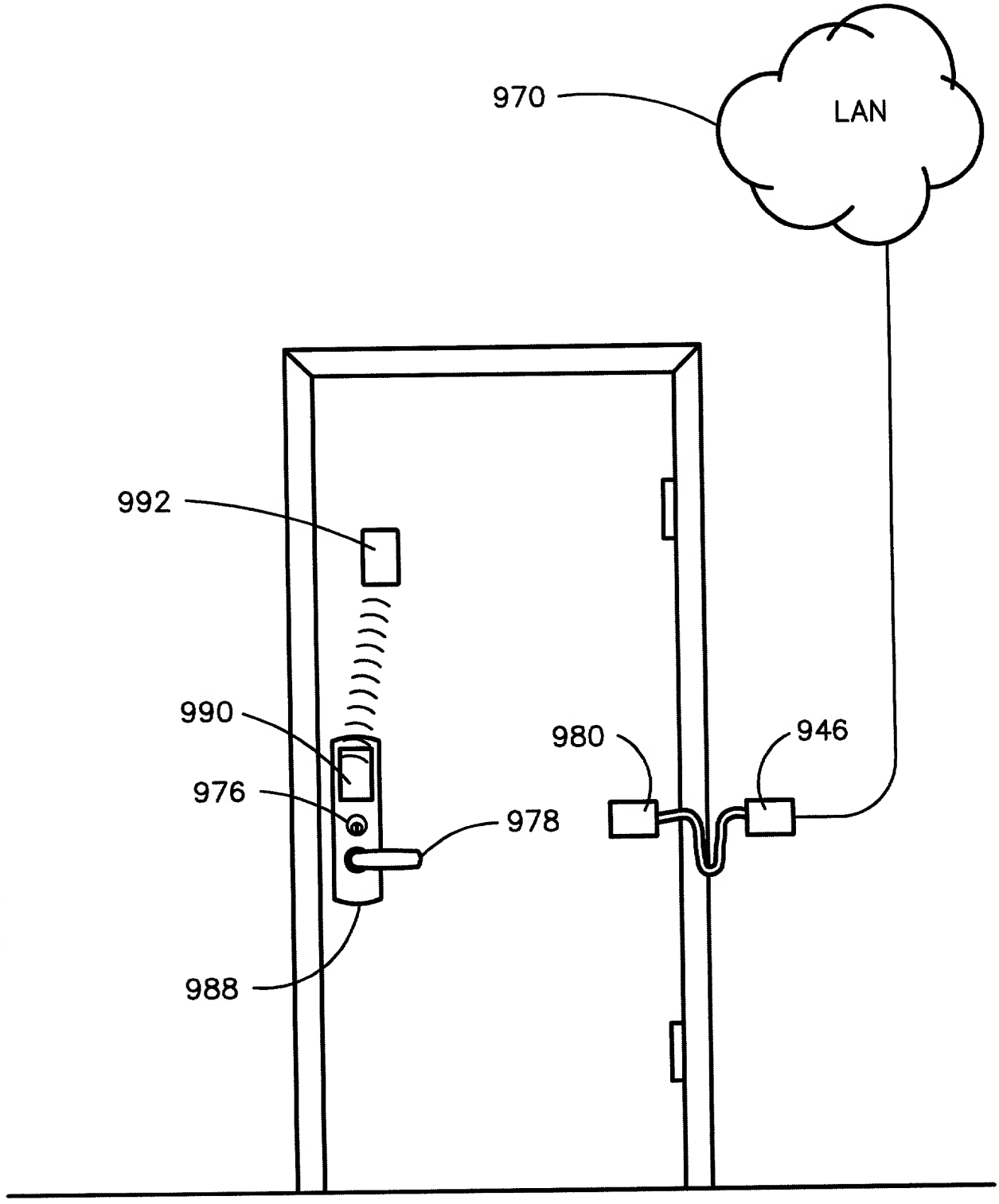
WIRED SWIPE CARD READER MORTISE

FIG. 45



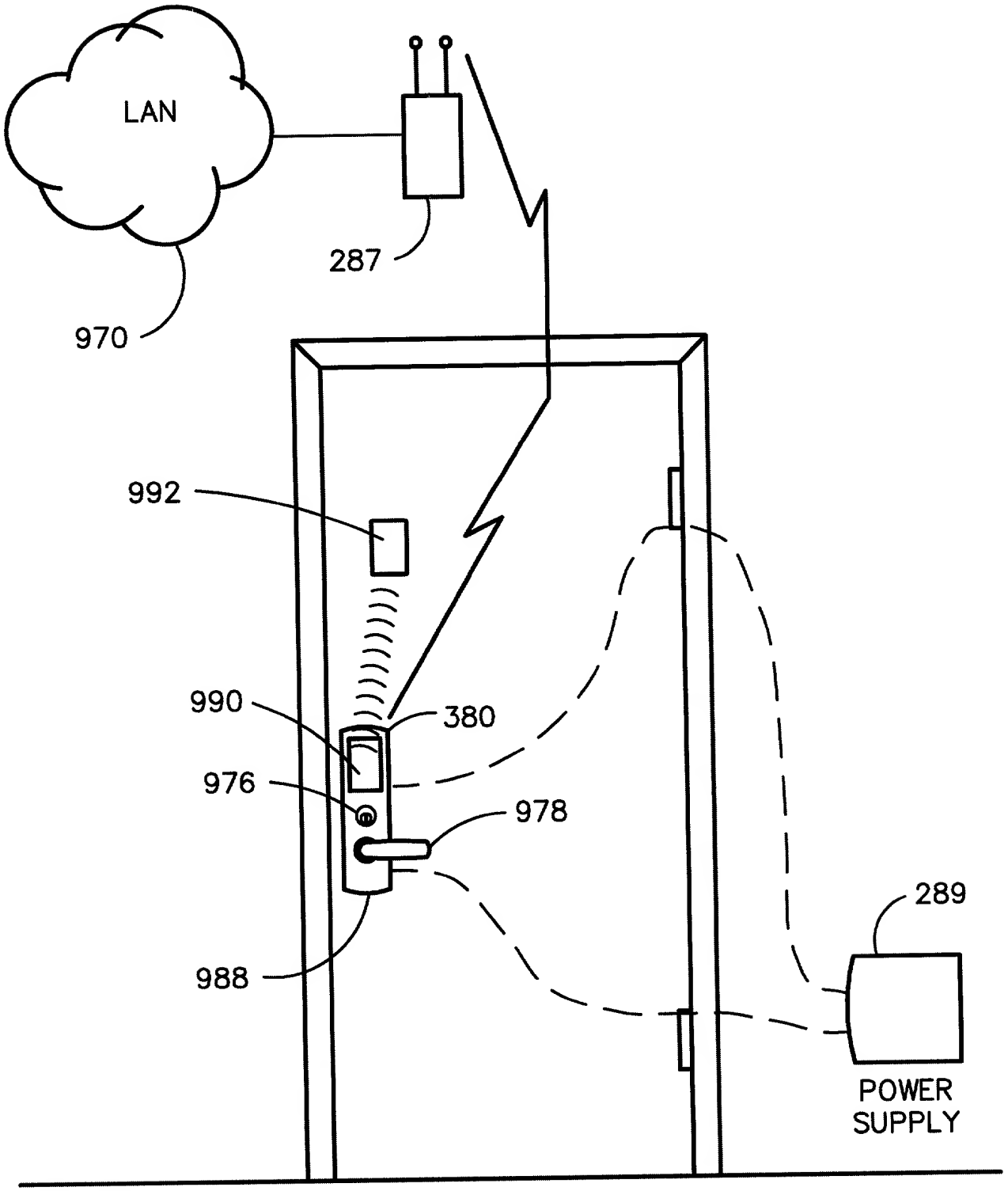
WIRELESS SWIPE CARD MORTISE LOCK

FIG. 45A



WIRED PROXIMITY CARD READER MORTISE LOCK

FIG. 46



WIRELESS PROXIMITY CARD READER MORTISE LOCK

FIG. 46A

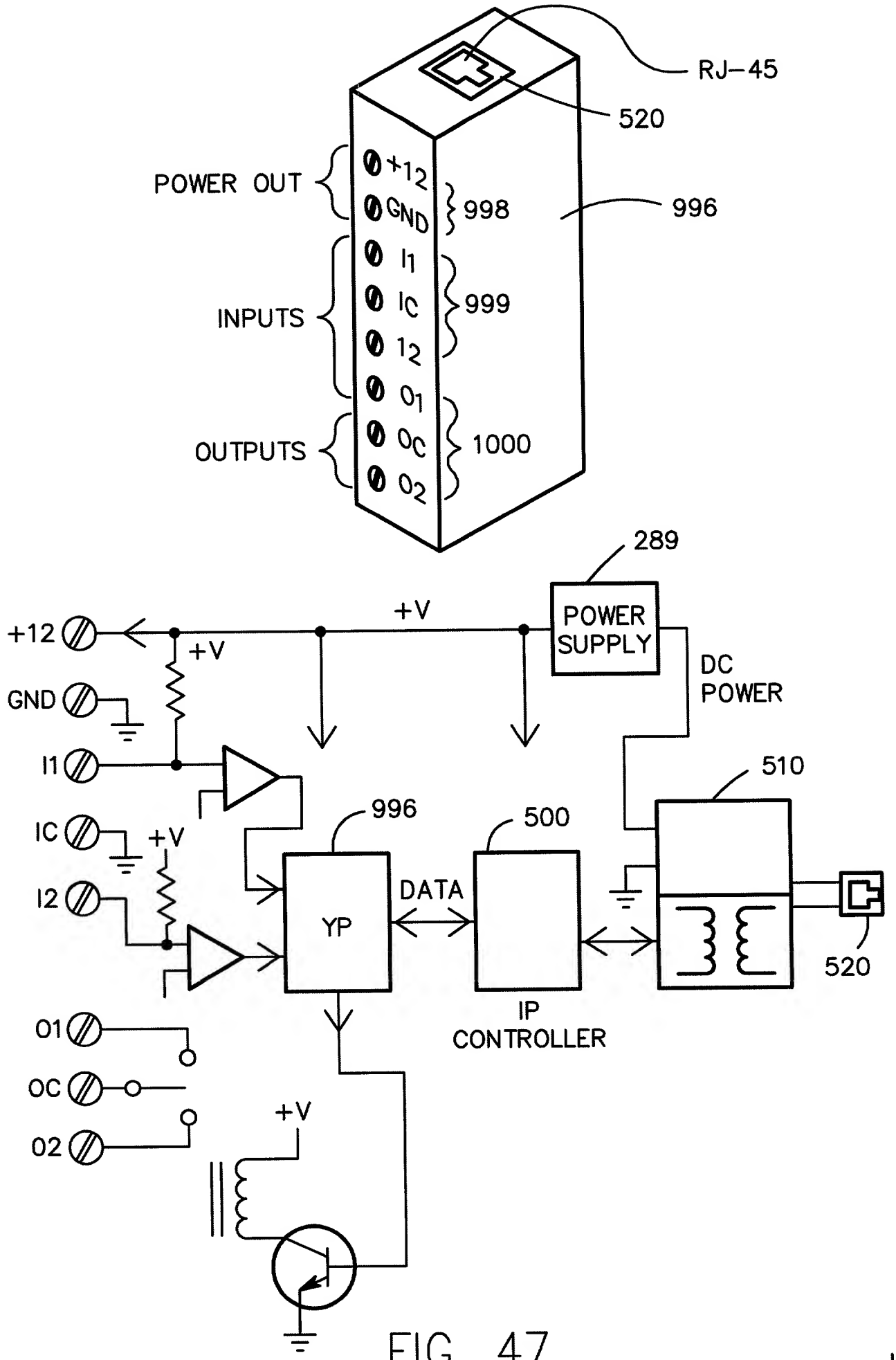

RJ-45
520
POWER OUT
+12
GND
998
996
INPUTS
I1
IC
I2
999
O1
OUTPUTS
OC
O2
1000
289
+V
POWER SUPPLY
+12
+V
DC POWER
GND
I1
510
996
500
IC
+V
I2
DATA
YP
520
IP CONTROLLER
O1
OC
O2
+V

FIG. 47

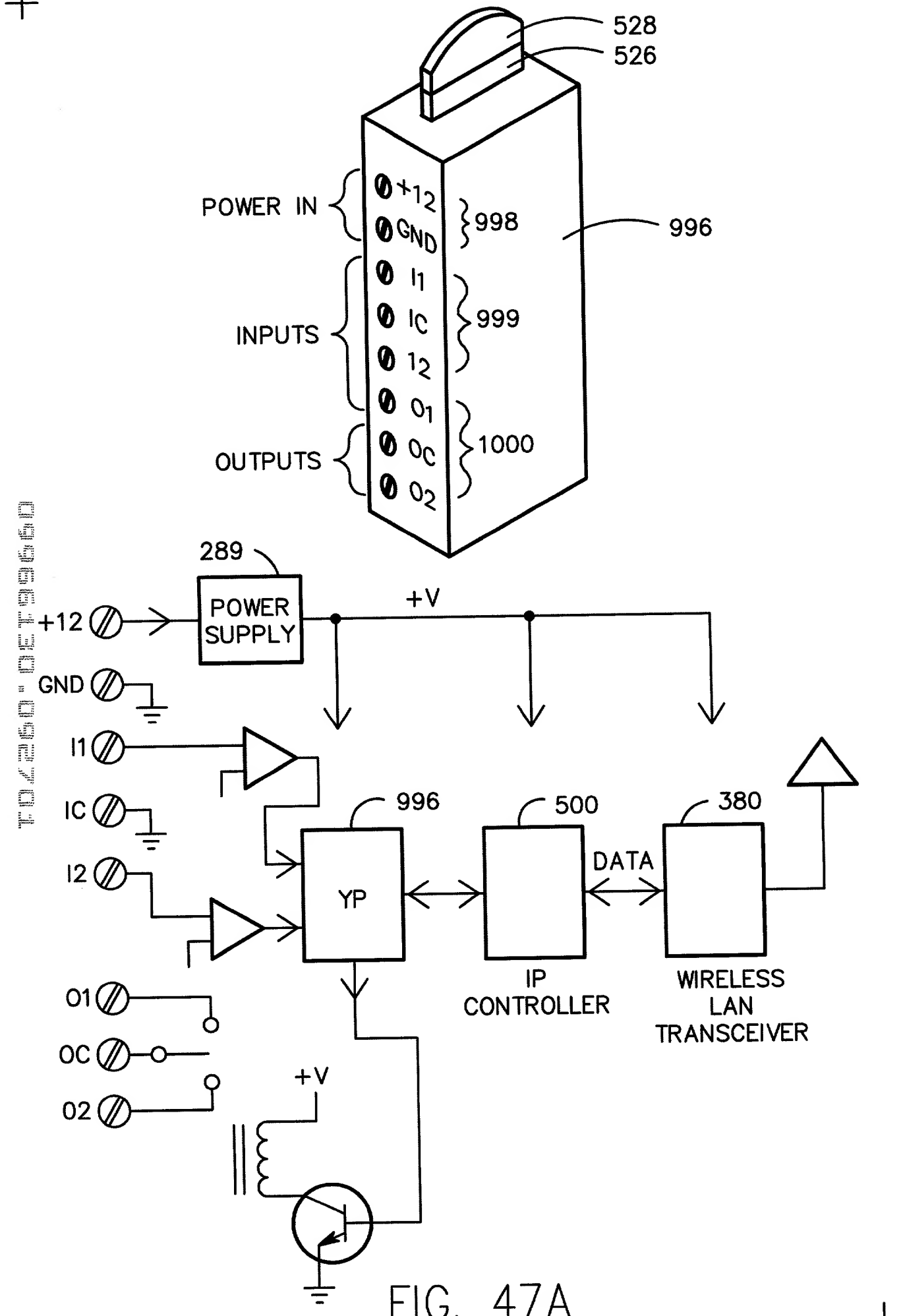
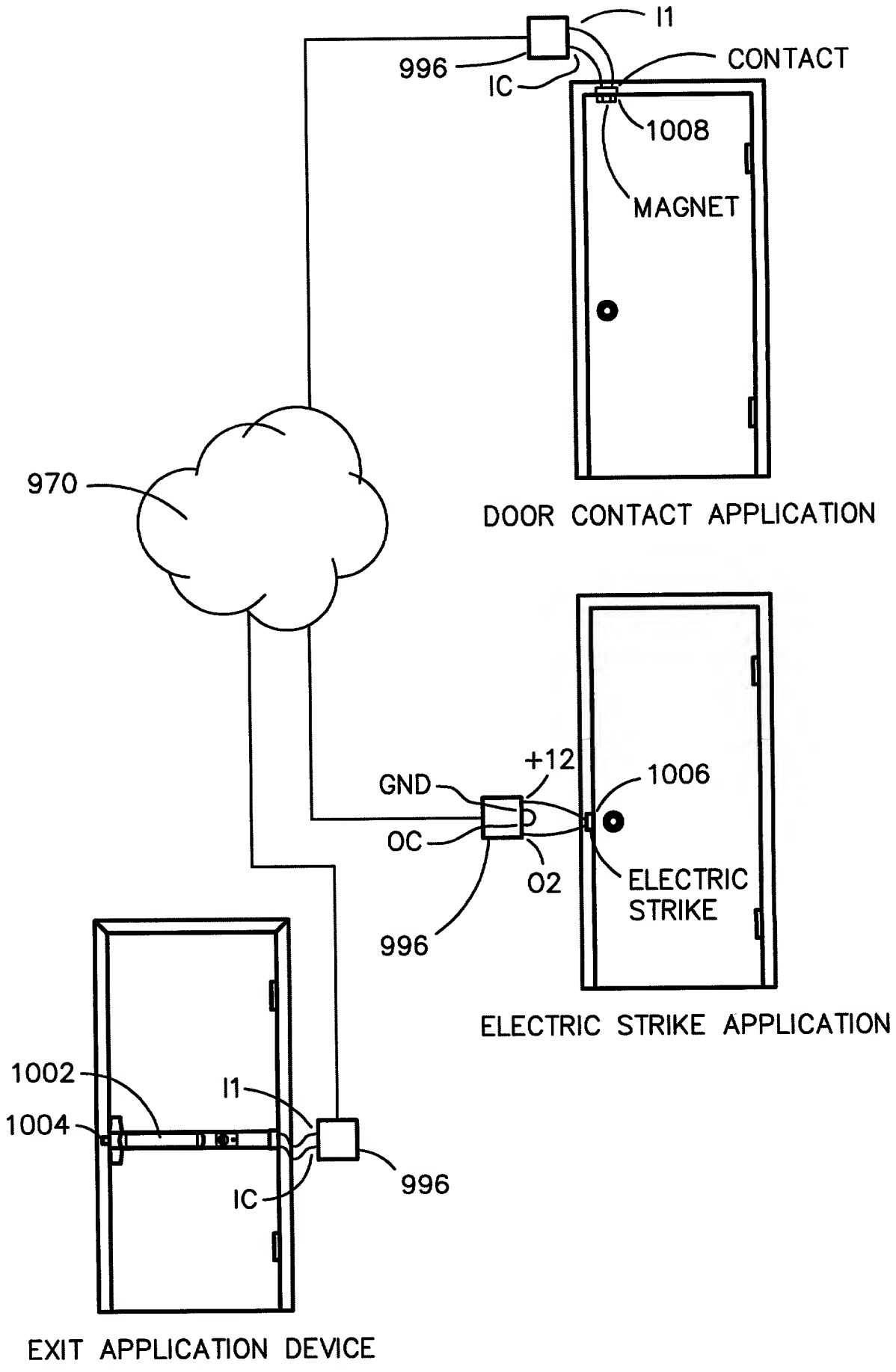
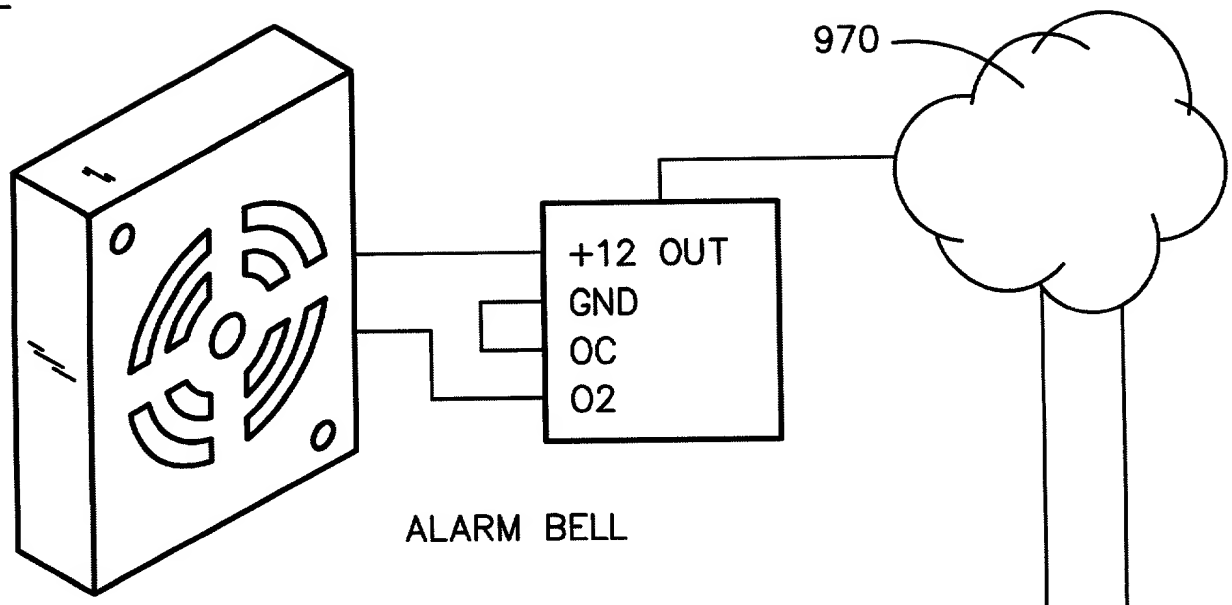

528
526
POWER IN
+12
GND
998
996
INPUTS
I1
IC
I2
999
O1
OC
O2
OUTPUTS
1000
289
POWER SUPPLY
+12
GND
+V
I1
IC
I2
996
YP
500
IP CONTROLLER
DATA
380
WIRELESS LAN TRANSCEIVER
O1
OC
O2
+V

FIG. 47A

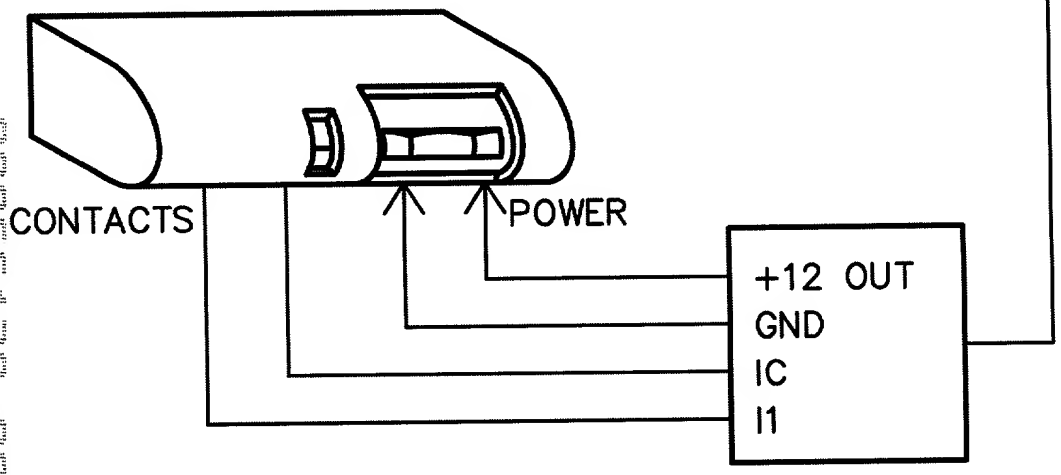


UNIVERSAL INTERFACE APPLICATIONS

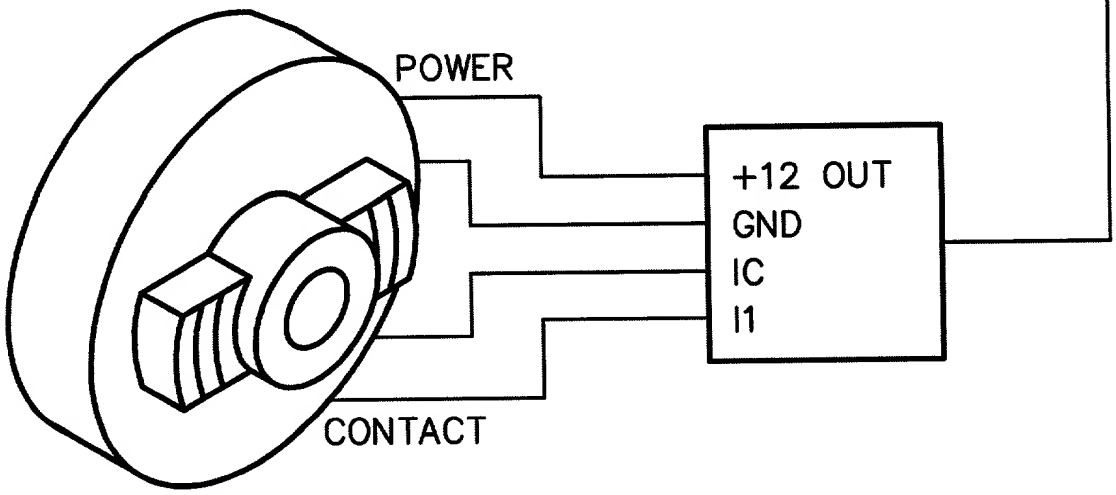
FIG. 48



ALARM BELL



EXIT MOTION DETECTION APPLICATION



SMOKE DETECTOR APPLICATION

UNIVERSAL INTERFACE APPLICATIONS

FIG. 49

SECURITY APPLIANCE BLOCK DIAGRAM

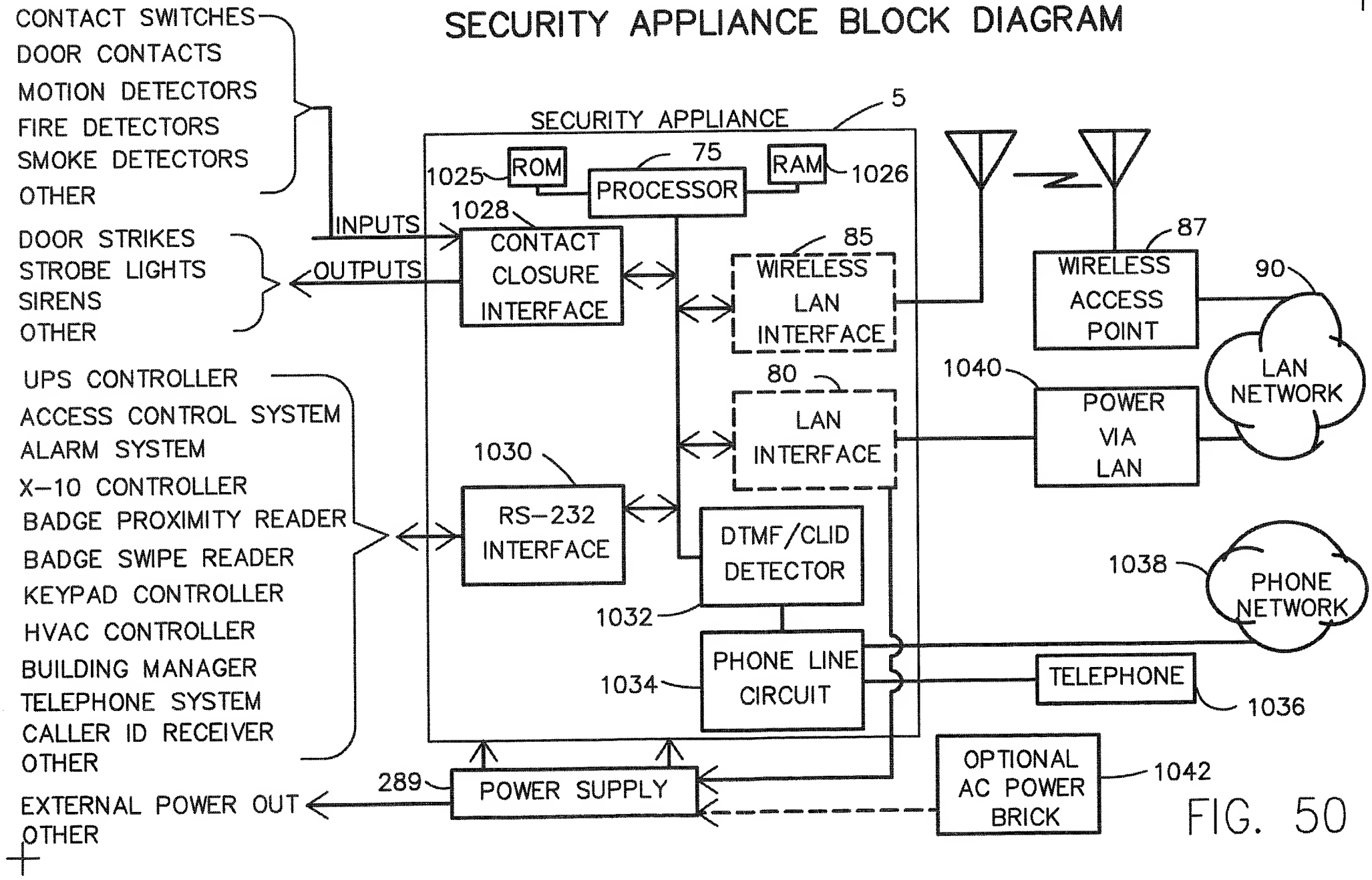


FIG. 50

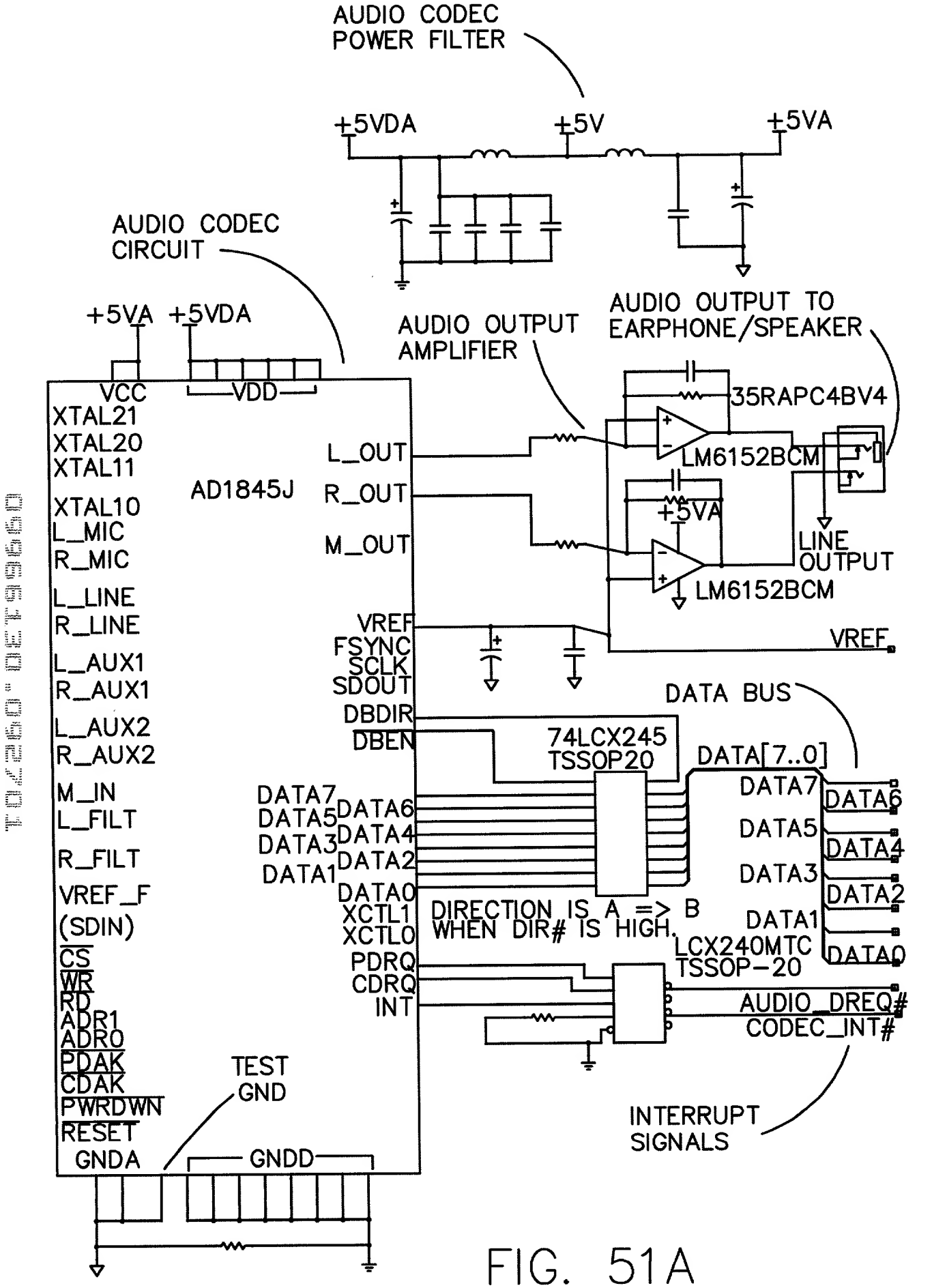

AUDIO CODEC
POWER FILTER
+5VDA
+5V
+5VA
AUDIO CODEC
CIRCUIT
+5VA
+5VDA
AUDIO OUTPUT
AMPLIFIER
AUDIO OUTPUT TO
EARPHONE/SPEAKER
35RAPC4BV4
LM6152BCM
+5VA
LINE
OUTPUT
LM6152BCM
VREF
VREF
VCC
VDD
XTAL21
XTAL20
XTAL11
XTAL10
L_MIC
R_MIC
L_LINE
R_LINE
L_AUX1
R_AUX1
L_AUX2
R_AUX2
M_IN
L_FILT
R_FILT
VREF_F
(SDIN)
CS
WR
RD
ADR1
ADR0
PDAK
CDAK
PWRDWN
RESET
GNDA
AD1845J
L_OUT
R_OUT
M_OUT
VREF
FSYNC
SCLK
SDOUT
DBDIR
DBEN
DATA7
DATA6
DATA5
DATA4
DATA3
DATA2
DATA1
DATA0
XCTL1
XCTL0
PDRQ
CDRQ
INT
TEST
GND
GNDD
74LCX245
TSSOP20
DATA BUS
DATA[7..0]
DIRECTION IS A => B
WHEN DIR# IS HIGH.
LCX240MTC
TSSOP-20
AUDIO_DREQ#
CODEC_INT#
INTERRUPT
SIGNALS

FIG. 51A

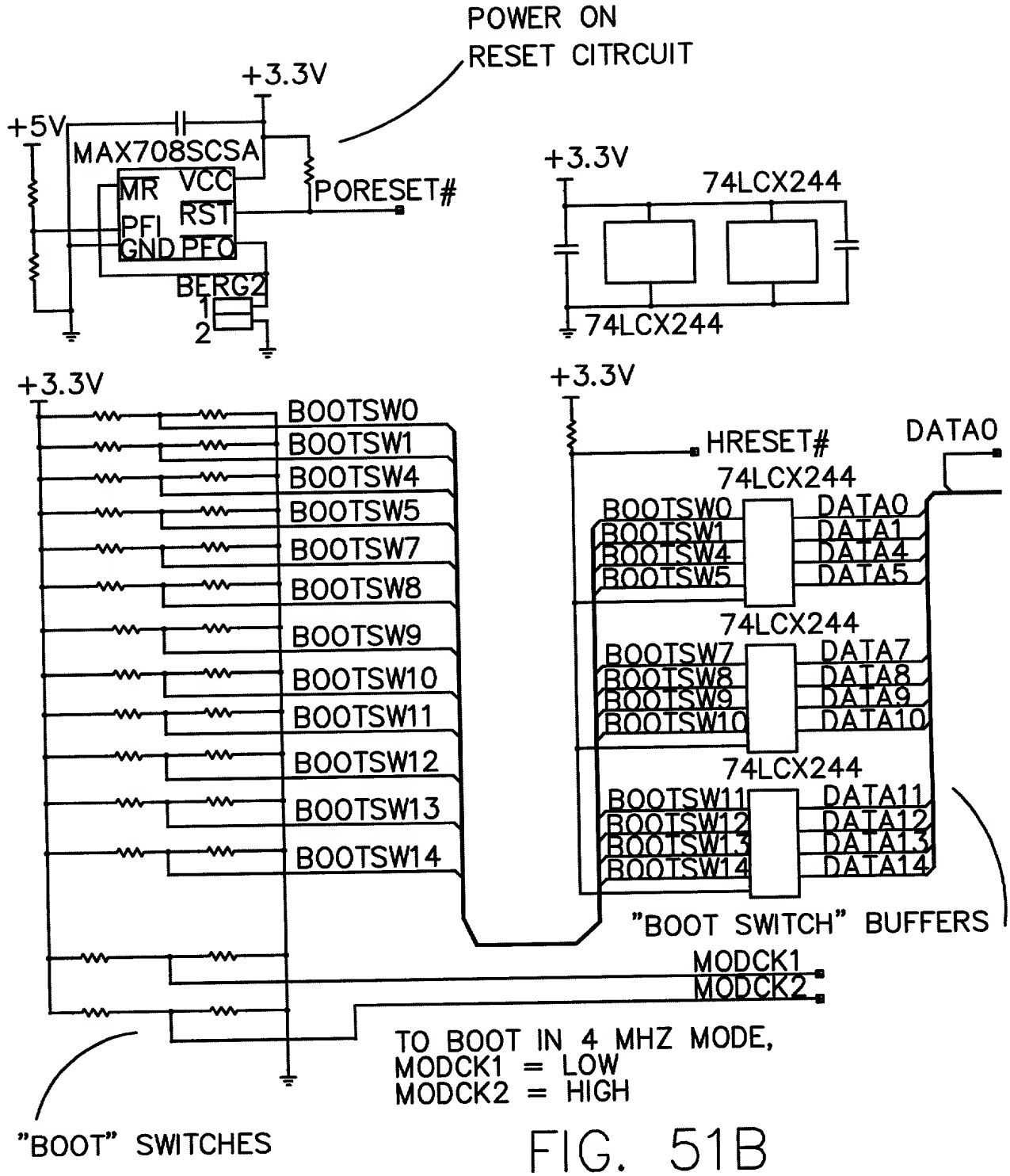

POWER ON
RESET CITRCUIT
+3.3V
+5V
MAX708SCSA
MR
VCC
RST
PFI
GND
PFO
PORESET#
BERG2
1
2
+3.3V
74LCX244
74LCX244
+3.3V
+3.3V
BOOTSW0
BOOTSW1
BOOTSW4
BOOTSW5
BOOTSW7
BOOTSW8
BOOTSW9
BOOTSW10
BOOTSW11
BOOTSW12
BOOTSW13
BOOTSW14
HRESET#
DATA0
74LCX244
BOOTSW0
BOOTSW1
BOOTSW4
BOOTSW5
DATA0
DATA1
DATA4
DATA5
74LCX244
BOOTSW7
BOOTSW8
BOOTSW9
BOOTSW10
DATA7
DATA8
DATA9
DATA10
74LCX244
BOOTSW11
BOOTSW12
BOOTSW13
BOOTSW14
DATA11
DATA12
DATA13
DATA14
"BOOT SWITCH" BUFFERS
MODCK1
MODCK2
TO BOOT IN 4 MHZ MODE,
MODCK1 = LOW
MODCK2 = HIGH
"BOOT" SWITCHES

FIG. 51B

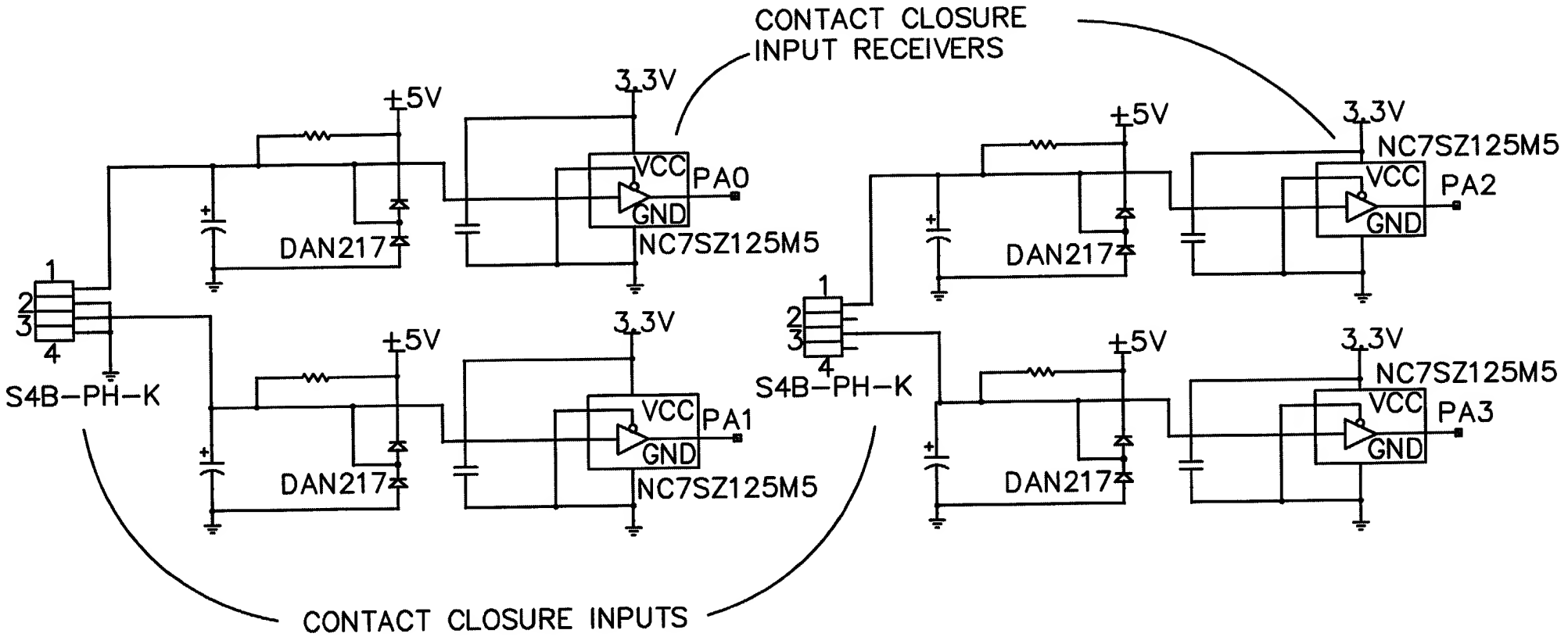


FIG. 51C

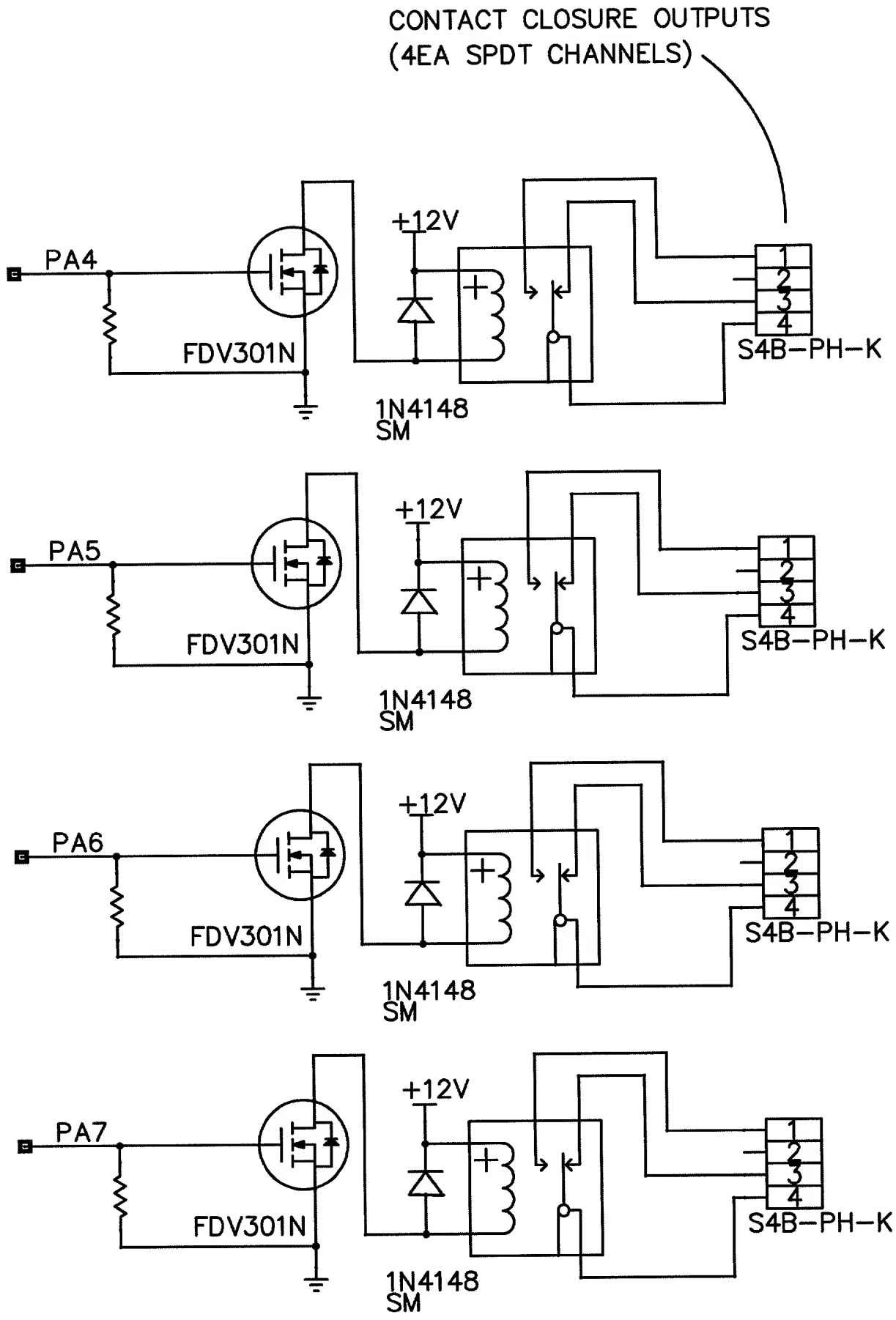

CONTACT CLOSURE OUTPUTS
(4EA SPDT CHANNELS)
PA4
FDV301N
+12V
1N4148
SM
S4B-PH-K
PA5
FDV301N
+12V
1N4148
SM
S4B-PH-K
PA6
FDV301N
+12V
1N4148
SM
S4B-PH-K
PA7
FDV301N
+12V
1N4148
SM
S4B-PH-K

FIG. 51D

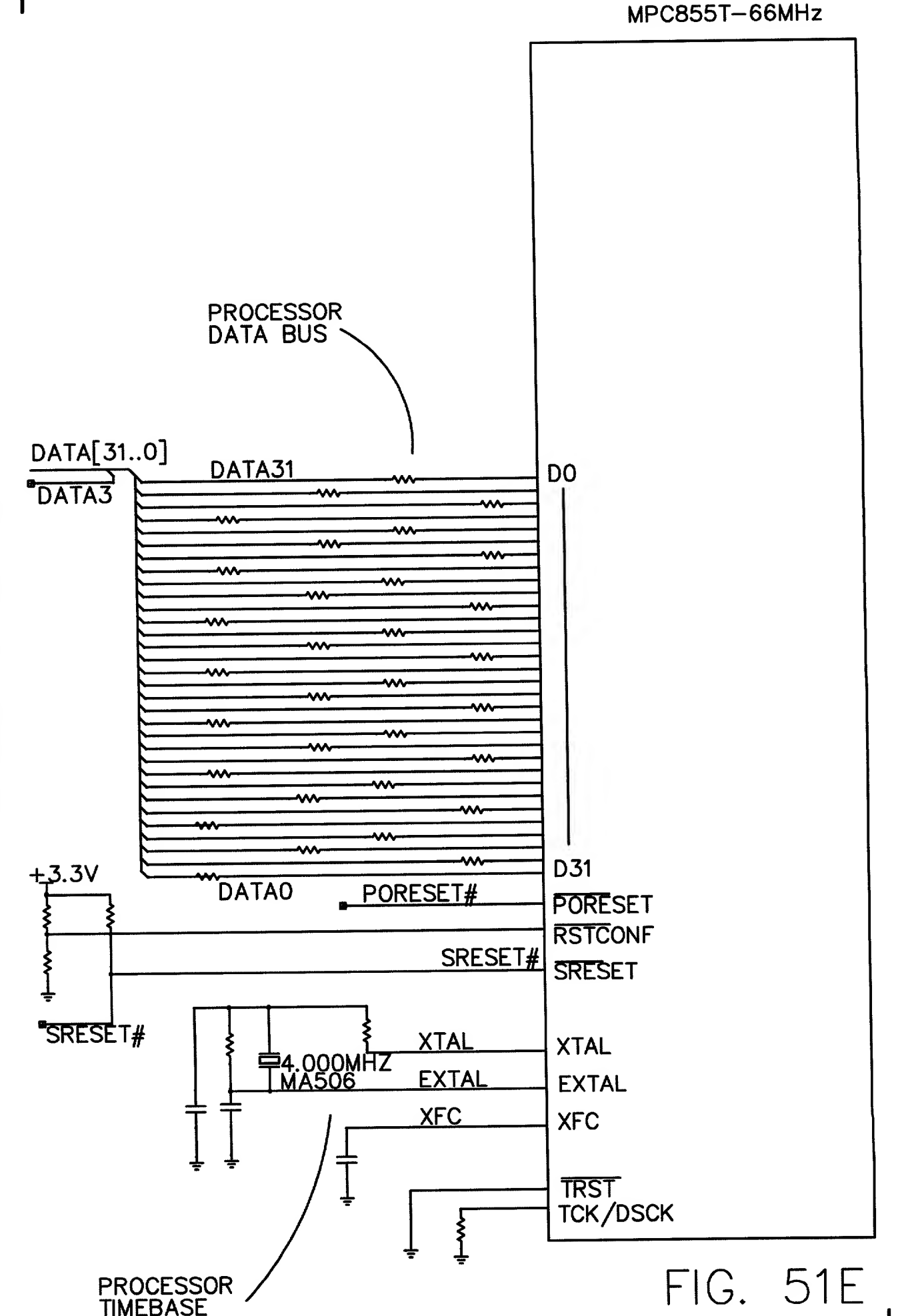

MPC855T-66MHz
PROCESSOR
DATA BUS
DATA[31..0]
DATA31
DATA3
DATA0
D0
D31
+3.3V
PORESET#
PORESET
RSTCONF
SRESET#
SRESET
SRESET#
XTAL
4.000MHZ
MA506
EXTAL
XFC
TRST
TCK/DSCK
PROCESSOR
TIMEBASE

FIG. 51E

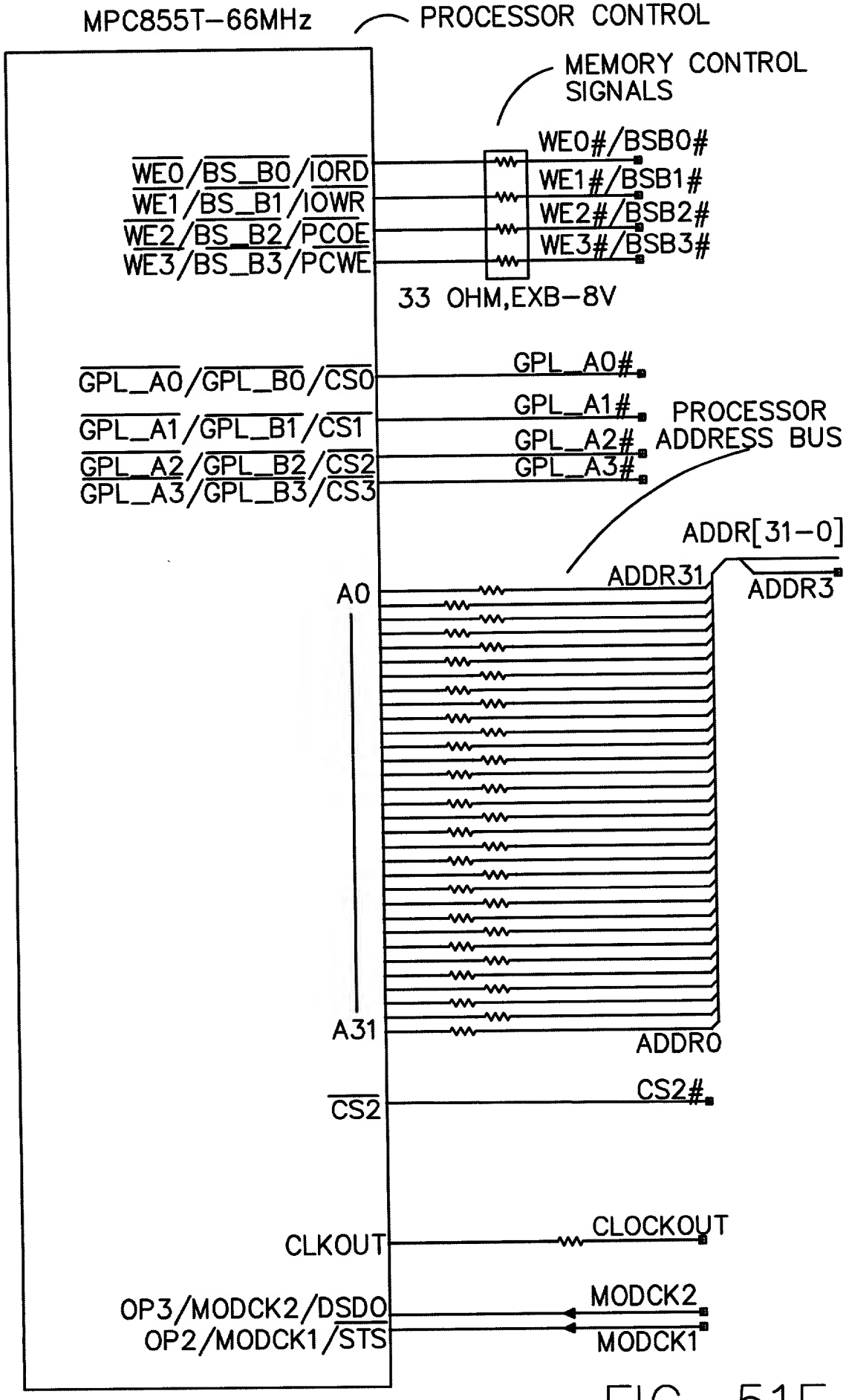

MPC855T-66MHz
PROCESSOR CONTROL
MEMORY CONTROL SIGNALS
WE0/BS_B0/IORD
WE1/BS_B1/IOWR
WE2/BS_B2/PCOE
WE3/BS_B3/PCWE
WE0#/BSB0#
WE1#/BSB1#
WE2#/BSB2#
WE3#/BSB3#
33 OHM,EXB-8V
GPL_A0/GPL_B0/CS0
GPL_A1/GPL_B1/CS1
GPL_A2/GPL_B2/CS2
GPL_A3/GPL_B3/CS3
GPL_A0#
GPL_A1#
GPL_A2#
GPL_A3#
PROCESSOR ADDRESS BUS
ADDR[31-0]
ADDR31
ADDR3
A0
A31
ADDR0
CS2
CS2#
CLKOUT
CLOCKOUT
OP3/MODCK2/DSDO
OP2/MODCK1/STS
MODCK2
MODCK1

FIG. 51F

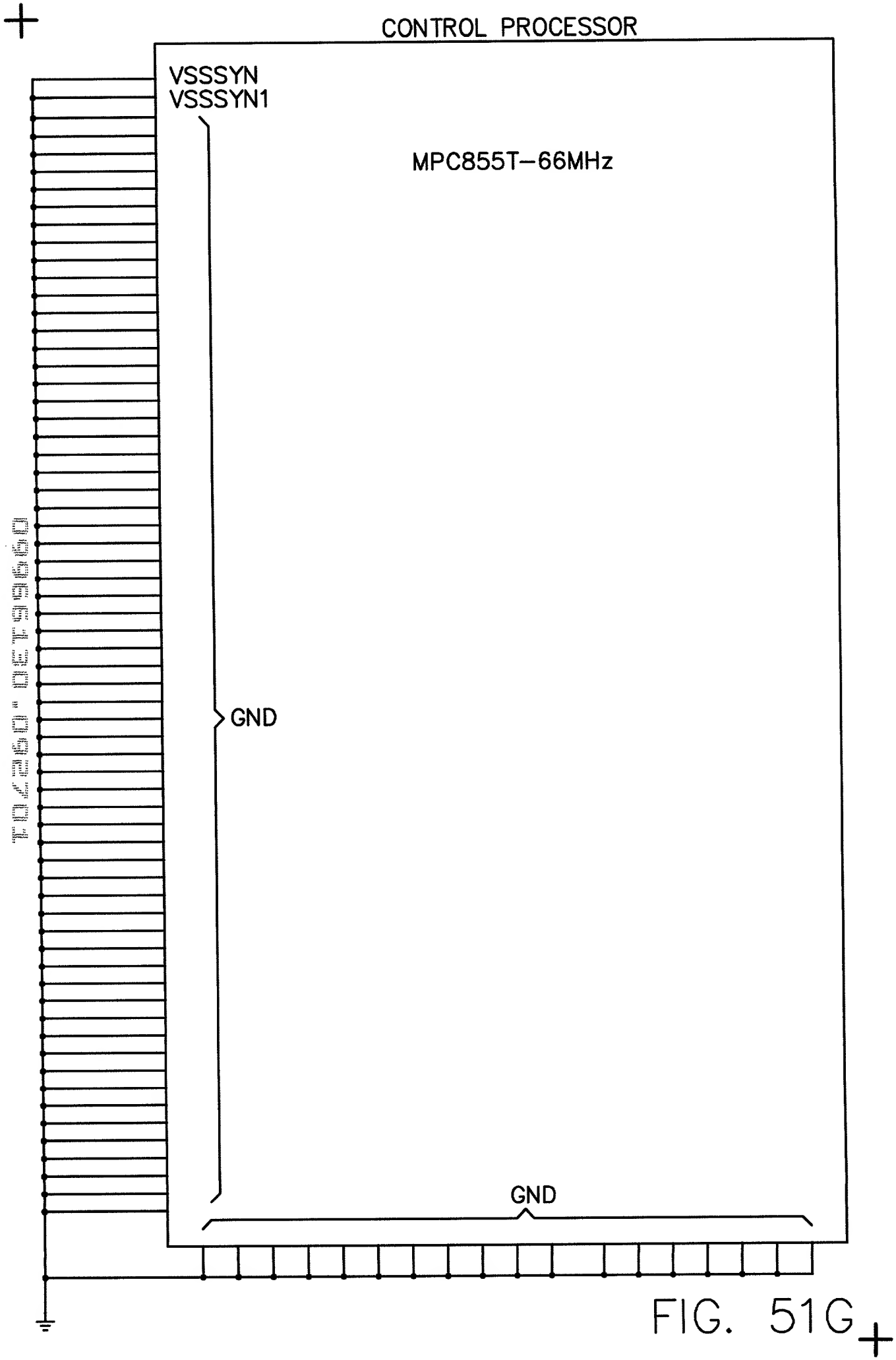


FIG. 51G

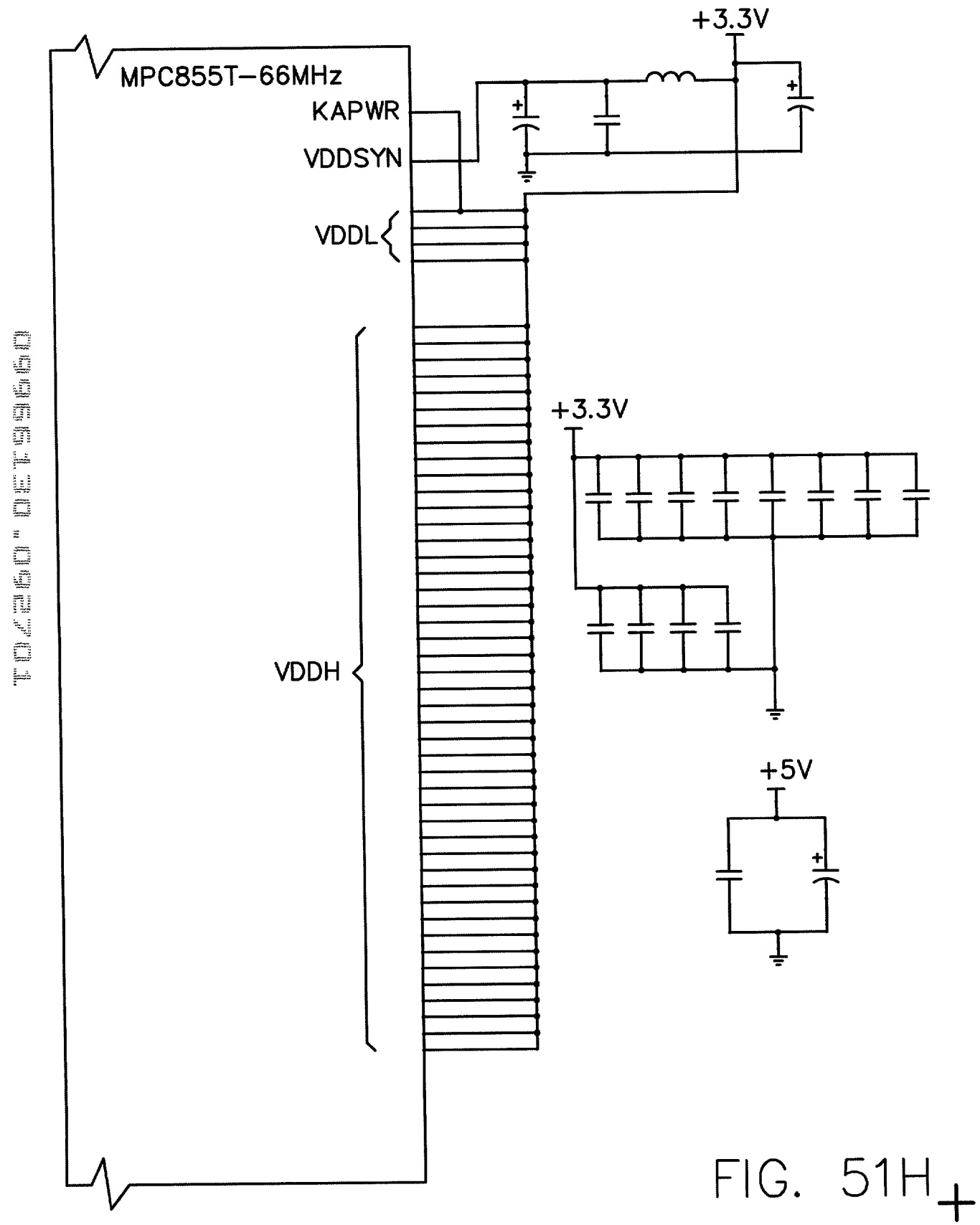


FIG. 51H

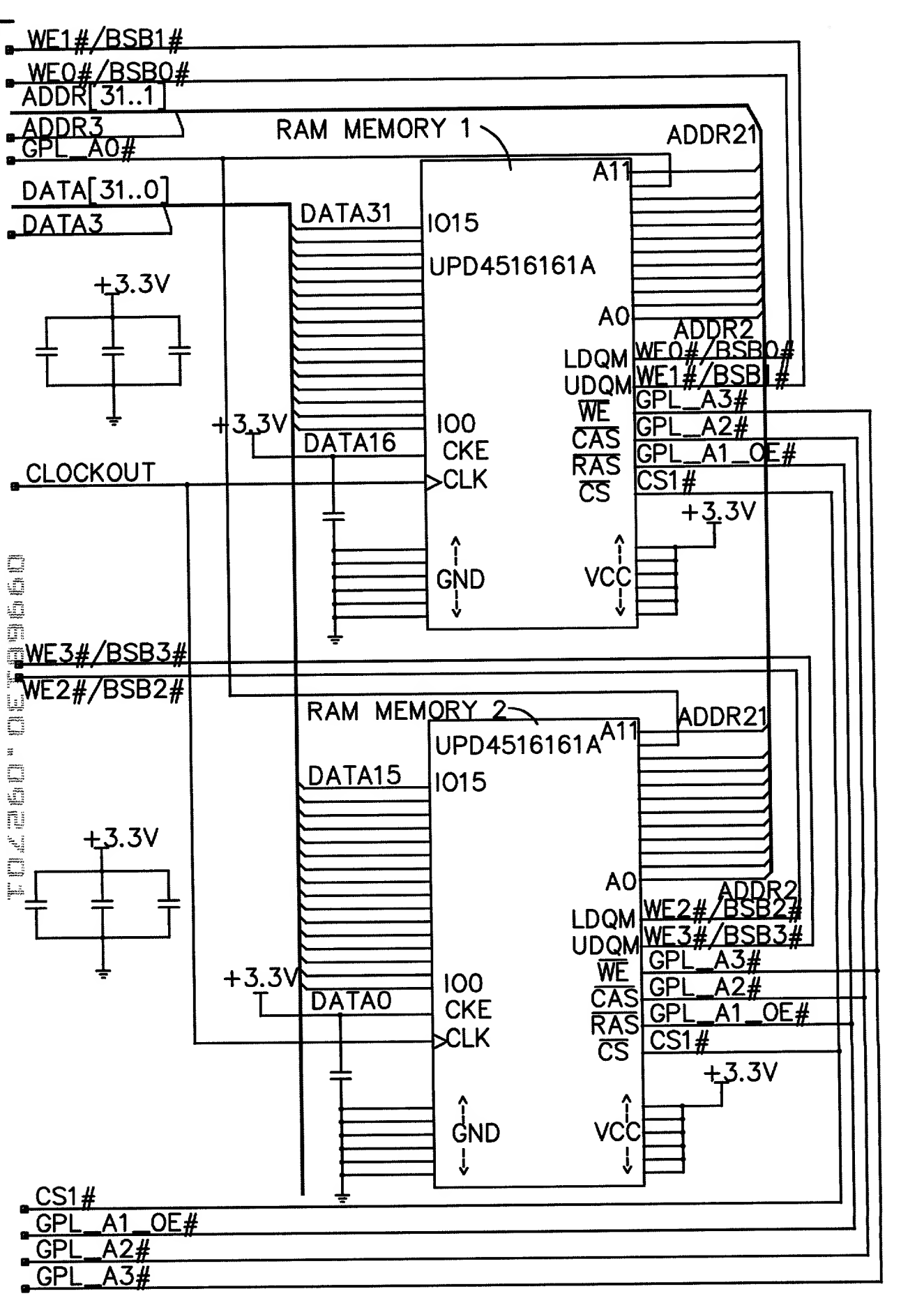

WE1#/BSB1#
WE0#/BSB0#
ADDR[31..1]
ADDR3
GPL_A0#
DATA[31..0]
DATA3
RAM MEMORY 1
ADDR21
A11
DATA31
IO15
UPD4516161A
A0
ADDR2
LDQM
UDQM
WE
CAS
RAS
CS
WE0#/BSB0#
WE1#/BSB1#
GPL_A3#
GPL_A2#
GPL_A1_OE#
CS1#
+3.3V
DATA16
IO0
CKE
CLK
CLOCKOUT
GND
VCC
WE3#/BSB3#
WE2#/BSB2#
RAM MEMORY 2
ADDR21
A11
UPD4516161A
DATA15
IO15
A0
ADDR2
WE2#/BSB2#
WE3#/BSB3#
GPL_A3#
GPL_A2#
GPL_A1_OE#
CS1#
DATA0
IO0
CKE
CLK
GND
VCC
CS1#
GPL_A1_OE#
GPL_A2#
GPL_A3#

FIG. 511

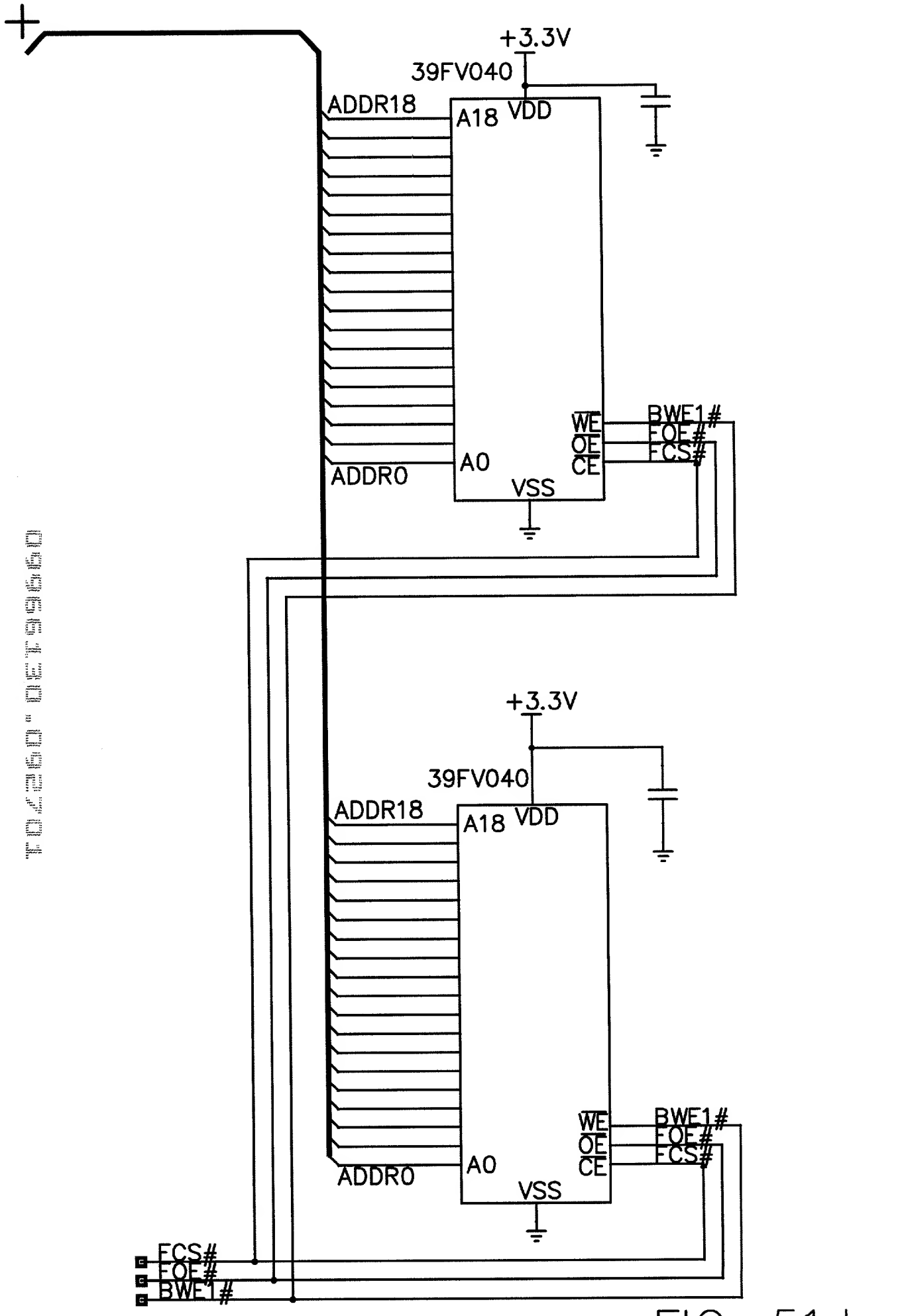

+3.3V
39FV040
ADDR18
A18
VDD
WE
OE
CE
BWE1#
FOE#
FCS#
ADDR0
A0
VSS
+3.3V
39FV040
ADDR18
A18
VDD
WE
OE
CE
BWE1#
FOE#
FCS#
ADDR0
A0
VSS
FCS#
FOE#
BWE1#

FIG. 51J

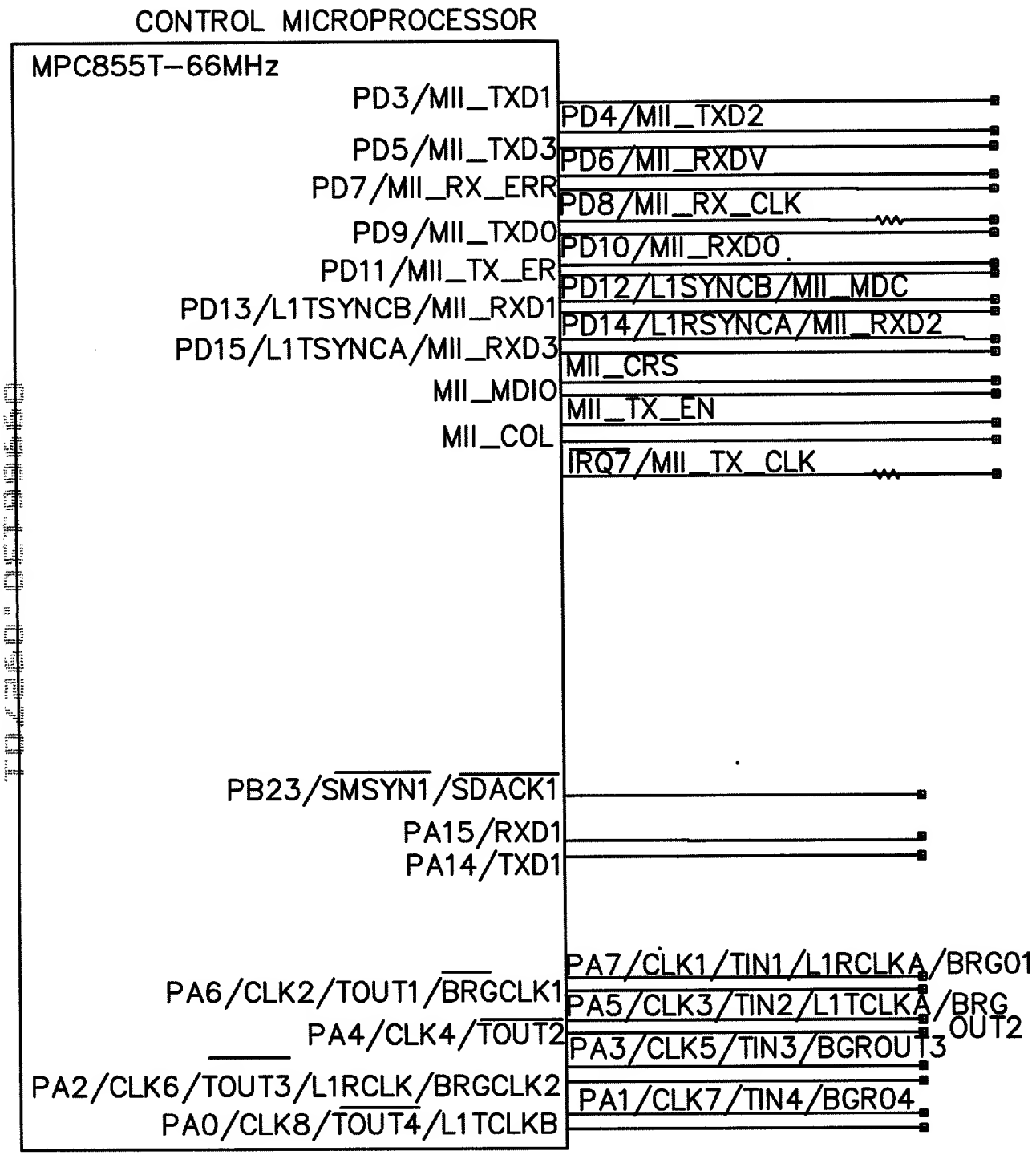

CONTROL MICROPROCESSOR
MPC855T-66MHz
PD3/MII_TXD1
PD4/MII_TXD2
PD5/MII_TXD3
PD6/MII_RXDV
PD7/MII_RX_ERR
PD8/MII_RX_CLK
PD9/MII_TXD0
PD10/MII_RXD0
PD11/MII_TX_ER
PD12/L1SYNCB/MII_MDC
PD13/L1TSYNCB/MII_RXD1
PD14/L1RSYNCA/MII_RXD2
PD15/L1TSYNCA/MII_RXD3
MII_CRS
MII_MDIO
MII_TX_EN
MII_COL
IRQ7/MII_TX_CLK
PB23/SMSYN1/SDACK1
PA15/RXD1
PA14/TXD1
PA7/CLK1/TIN1/L1RCLKA/BRG01
PA6/CLK2/TOUT1/BRGCLK1
PA5/CLK3/TIN2/L1TCLKA/BRG
OUT2
PA4/CLK4/TOUT2
PA3/CLK5/TIN3/BGROUT3
PA2/CLK6/TOUT3/L1RCLK/BRGCLK2
PA1/CLK7/TIN4/BGR04
PA0/CLK8/TOUT4/L1TCLKB

FIG. 51K

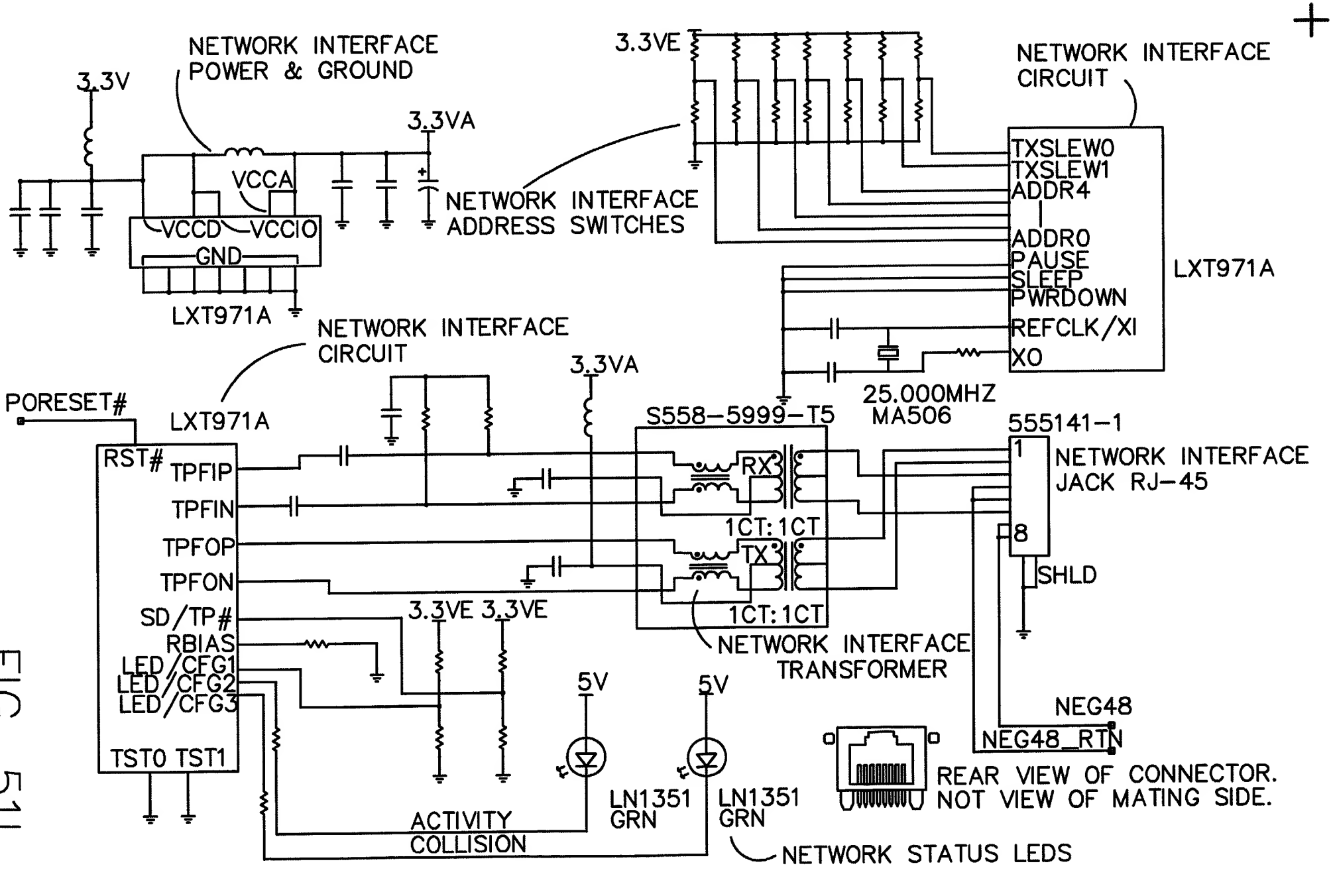

NETWORK INTERFACE
POWER & GROUND
3.3V
3.3VA
VCCA
VCCD
VCCIO
GND
LXT971A
NETWORK INTERFACE
ADDRESS SWITCHES
3.3VE
NETWORK INTERFACE
CIRCUIT
TXSLEW0
TXSLEW1
ADDR4
ADDR0
PAUSE
SLEEP
PWRDOWN
REFCLK/XI
XO
LXT971A
25.000MHZ
MA506
NETWORK INTERFACE
CIRCUIT
LXT971A
PORESET#
RST#
TPFIP
TPFIN
TPFOP
TPFON
SD/TP#
RBIAS
LED/CFG1
LED/CFG2
LED/CFG3
TST0 TST1
3.3VA
S558-5999-T5
RX
TX
1CT:1CT
1CT:1CT
NETWORK INTERFACE
TRANSFORMER
555141-1
1
8
NETWORK INTERFACE
JACK RJ-45
SHLD
NEG48
NEG48_RTN
3.3VE 3.3VE
5V
5V
ACTIVITY
COLLISION
LN1351
GRN
LN1351
GRN
NETWORK STATUS LEDS
REAR VIEW OF CONNECTOR.
NOT VIEW OF MATING SIDE.

FIG. 51

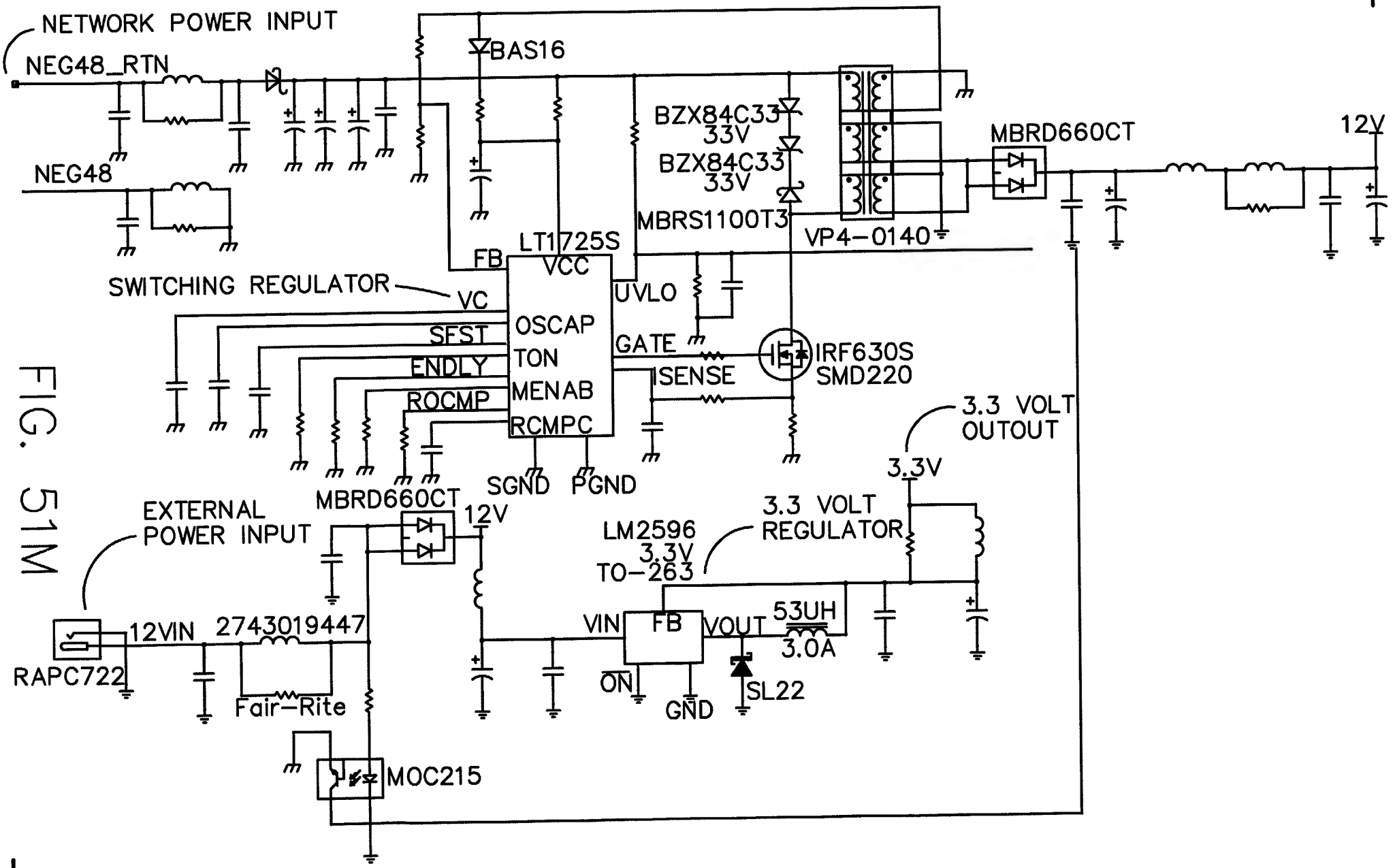

NETWORK POWER INPUT
NEG48_RTN
NEG48
BAS16
BZX84C33
33V
BZX84C33
33V
MBRS1100T3
VP4-0140
MBRD660CT
12V
LT1725S
FB
VCC
SWITCHING REGULATOR
VC
UVLO
OSCAP
SFST
GATE
IRF630S
SMD220
TON
ENDLY
ISENSE
MENAB
ROCMP
RCMPC
SGND
PGND
3.3 VOLT
OUTOUT
3.3V
MBRD660CT
12V
EXTERNAL
POWER INPUT
LM2596
3.3V
TO-263
3.3 VOLT
REGULATOR
12VIN
2743019447
VIN
FB
VOUT
53UH
3.0A
RAPC722
Fair-Rite
ON
GND
SL22
MOC215

FIG. 51M

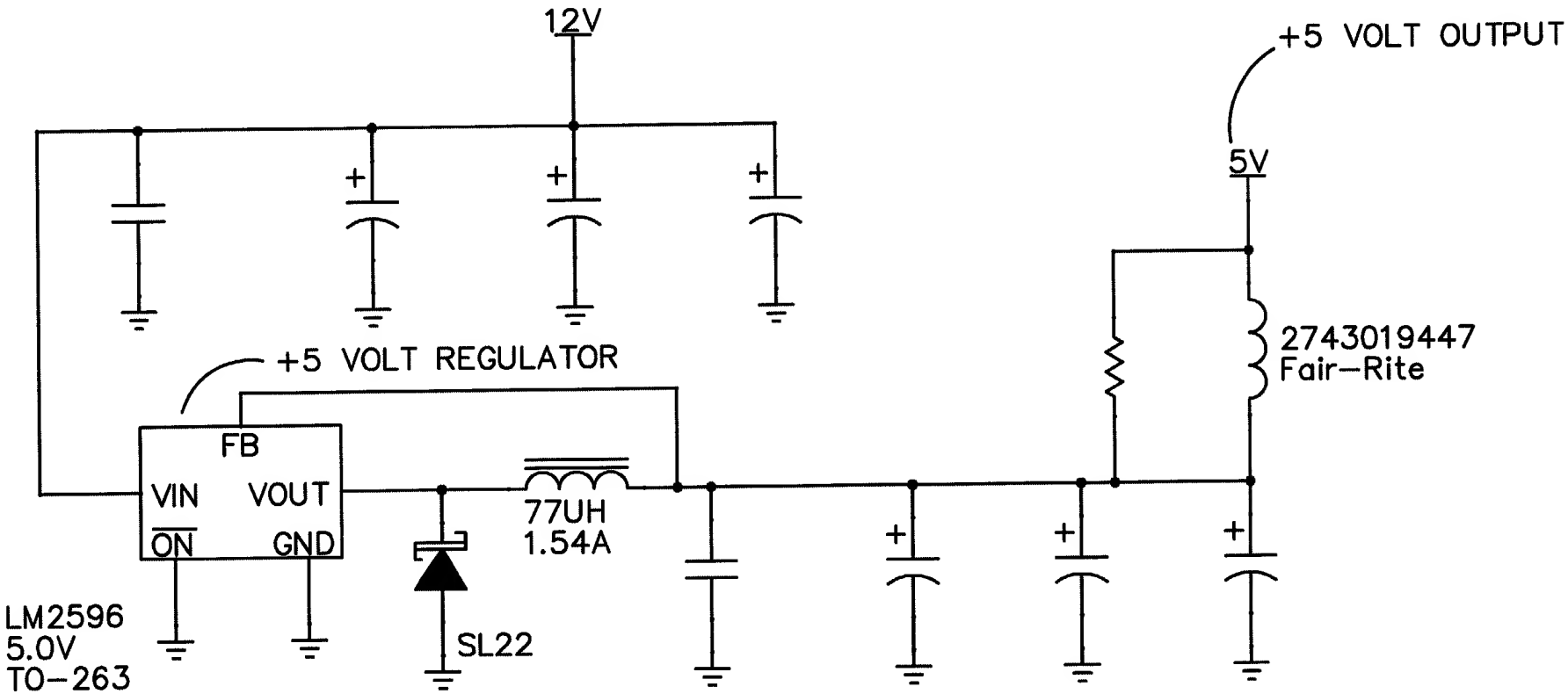


FIG. 51N

5.0 V REG CIN
3 EACH OF NICHICON PARTS:
UUD1E270MCR1GS
UUD1V270MCR1GS
UUD1E330MCR1GS
UUD1V330MCR1GS
UUD1E470MCR1GS
UUD1V470MCR1GS

5.0 V REG COUT
1EA PANASONIC EEVFC2A680Q
3 EA NICHICON:
UUD1E270MCR1GS
UUD1V270MCR1GS
UUD1C330MCR1GS
UUD1E330MCR1GS
UUD1V330MCR1GS
UUD1A470MCR1GS

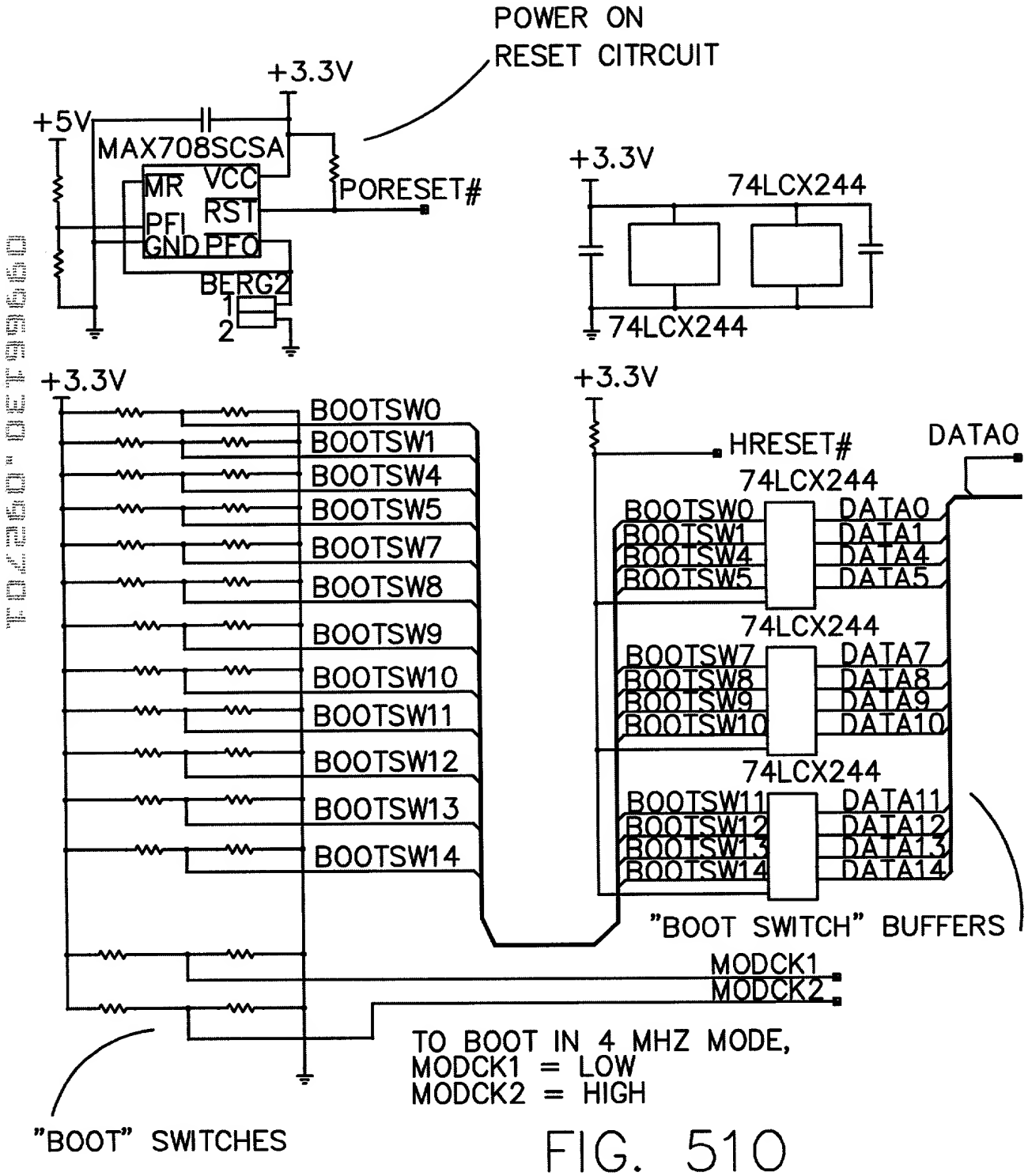

POWER ON
RESET CITRCUIT
+3.3V
+5V
MAX708SCSA
MR
VCC
RST
PFI
GND
PFO
PORESET#
BERG2
1
2
+3.3V
74LCX244
74LCX244
+3.3V
BOOTSW0
BOOTSW1
BOOTSW4
BOOTSW5
BOOTSW7
BOOTSW8
BOOTSW9
BOOTSW10
BOOTSW11
BOOTSW12
BOOTSW13
BOOTSW14
+3.3V
HRESET#
DATA0
74LCX244
BOOTSW0
BOOTSW1
BOOTSW4
BOOTSW5
DATA0
DATA1
DATA4
DATA5
74LCX244
BOOTSW7
BOOTSW8
BOOTSW9
BOOTSW10
DATA7
DATA8
DATA9
DATA10
74LCX244
BOOTSW11
BOOTSW12
BOOTSW13
BOOTSW14
DATA11
DATA12
DATA13
DATA14
"BOOT SWITCH" BUFFERS
MODCK1
MODCK2
TO BOOT IN 4 MHZ MODE,
MODCK1 = LOW
MODCK2 = HIGH
"BOOT" SWITCHES

FIG. 510

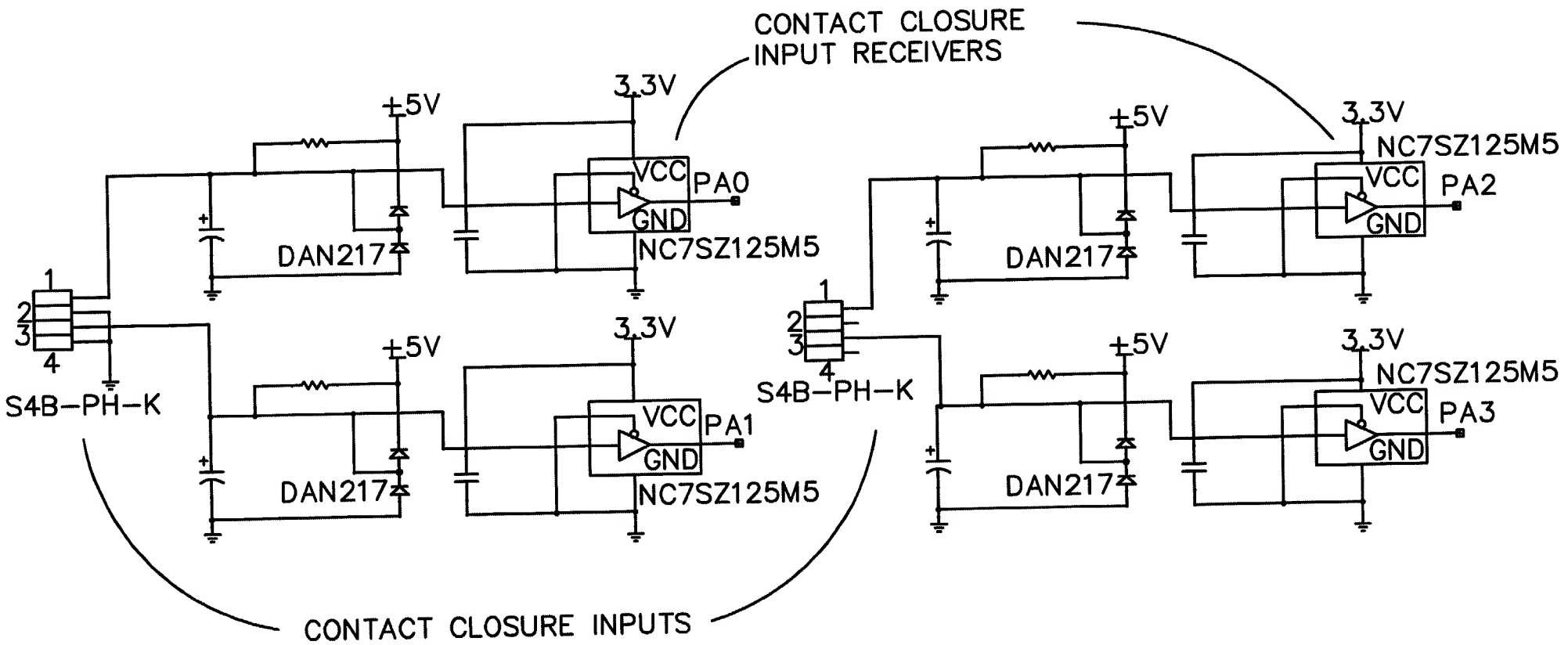


FIG. 51P

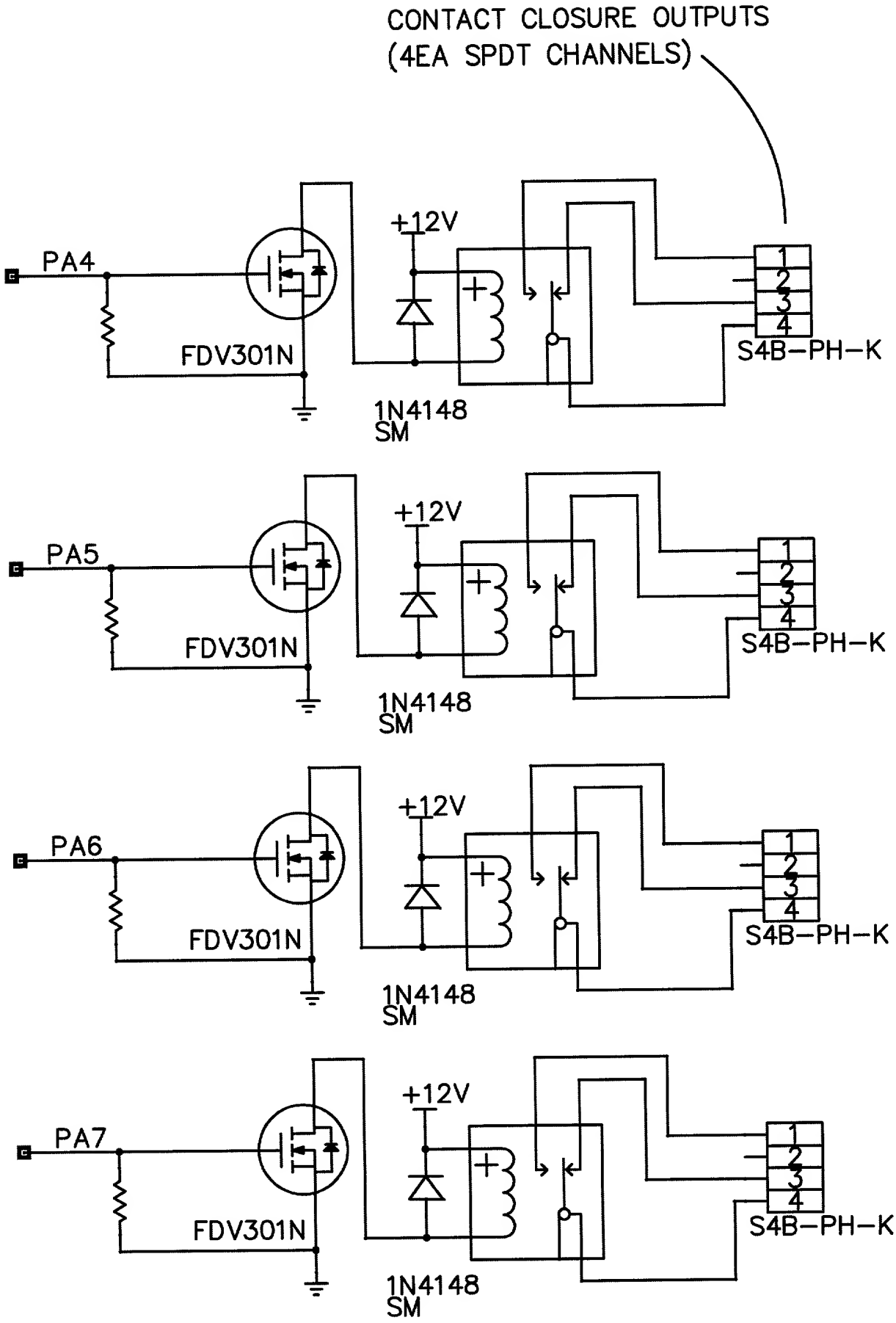

CONTACT CLOSURE OUTPUTS
(4EA SPDT CHANNELS)
PA4
FDV301N
+12V
1N4148
SM
S4B-PH-K
PA5
FDV301N
+12V
1N4148
SM
S4B-PH-K
PA6
FDV301N
+12V
1N4148
SM
S4B-PH-K
PA7
FDV301N
+12V
1N4148
SM
S4B-PH-K

FIG. 51Q

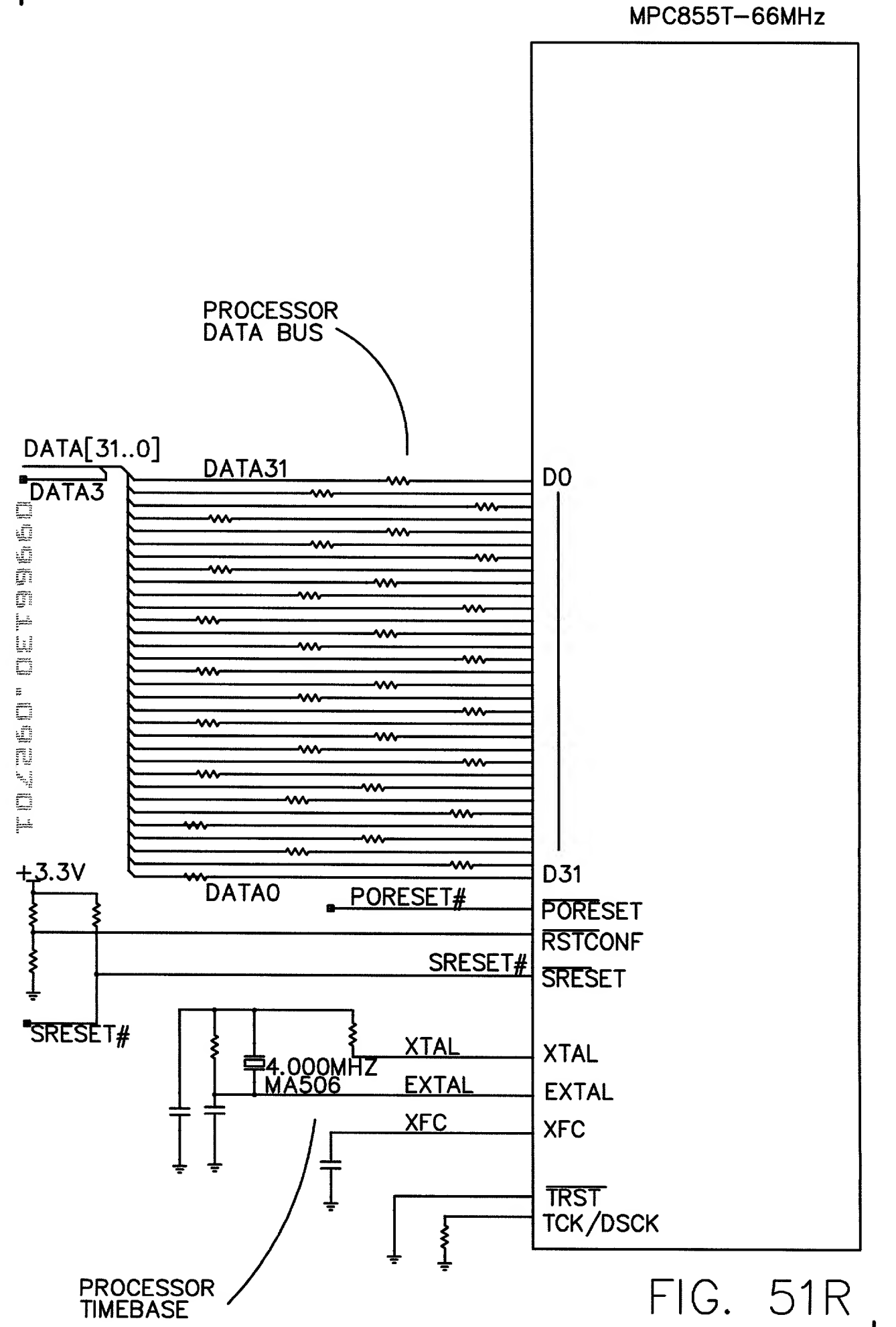

MPC855T–66MHz
PROCESSOR
DATA BUS
DATA[31..0]
DATA31
DATA3
D0
D31
DATA0
+3.3V
PORESET#
PORESET
RSTCONF
SRESET#
SRESET
SRESET#
XTAL
4.000MHZ
MA506
EXTAL
XTAL
EXTAL
XFC
XFC
TRST
TCK/DSCK
PROCESSOR
TIMEBASE

FIG. 51R

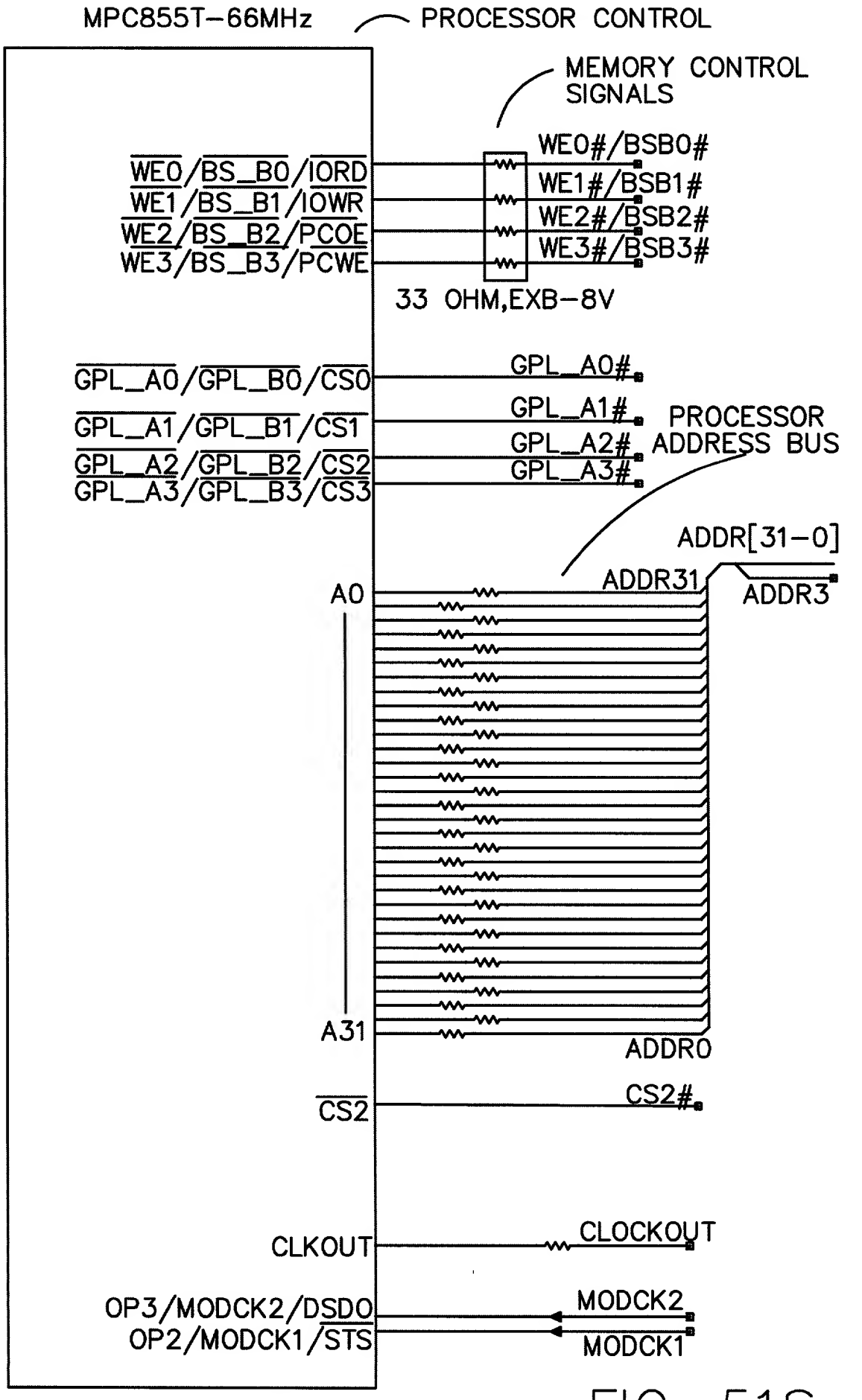

MPC855T-66MHz
PROCESSOR CONTROL
MEMORY CONTROL SIGNALS
WE0/BS_B0/IORD
WE1/BS_B1/IOWR
WE2/BS_B2/PCOE
WE3/BS_B3/PCWE
WE0#/BSB0#
WE1#/BSB1#
WE2#/BSB2#
WE3#/BSB3#
33 OHM,EXB-8V
GPL_A0/GPL_B0/CS0
GPL_A1/GPL_B1/CS1
GPL_A2/GPL_B2/CS2
GPL_A3/GPL_B3/CS3
GPL_A0#
GPL_A1#
GPL_A2#
GPL_A3#
PROCESSOR ADDRESS BUS
ADDR[31-0]
ADDR31
ADDR3
A0
A31
ADDR0
CS2
CS2#
CLKOUT
CLOCKOUT
OP3/MODCK2/DSDO
OP2/MODCK1/STS
MODCK2
MODCK1

FIG. 51S

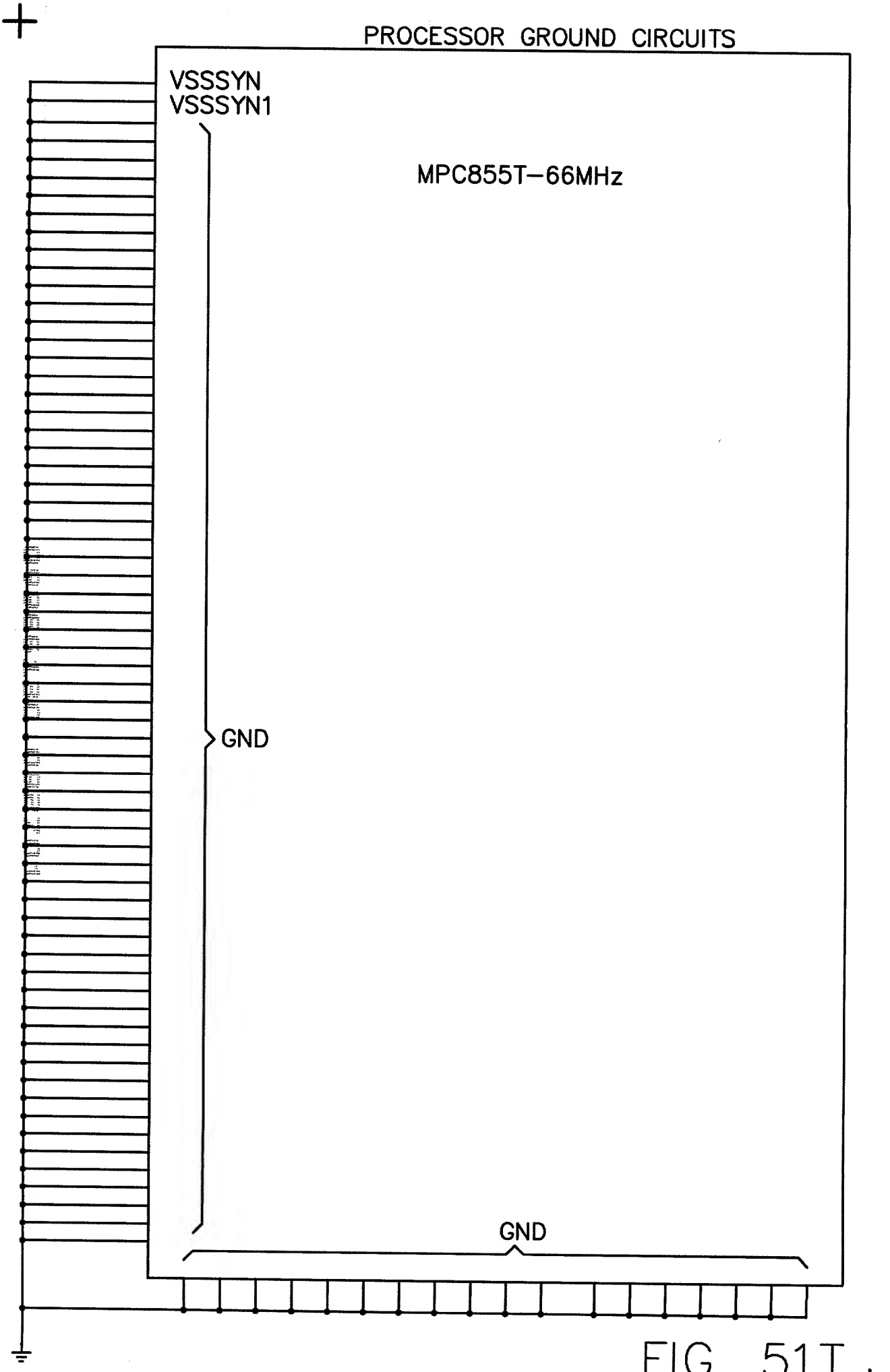

PROCESSOR GROUND CIRCUITS
VSSSYN
VSSSYN1
MPC855T–66MHz
GND
GND

FIG. 51T

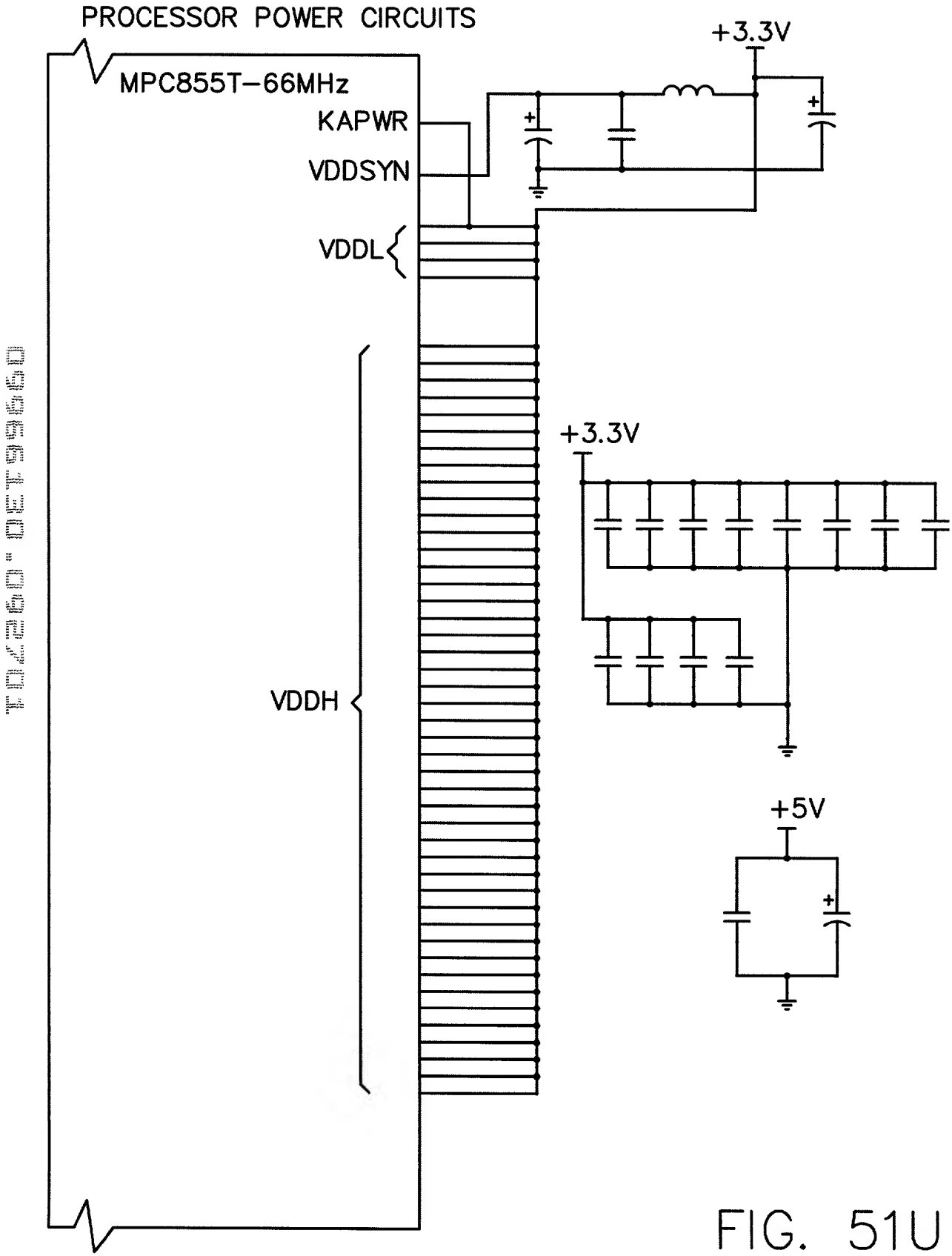

PROCESSOR POWER CIRCUITS
MPC855T–66MHz
KAPWR
VDDSYN
VDDL
VDDH
+3.3V
+3.3V
+5V

FIG. 51U

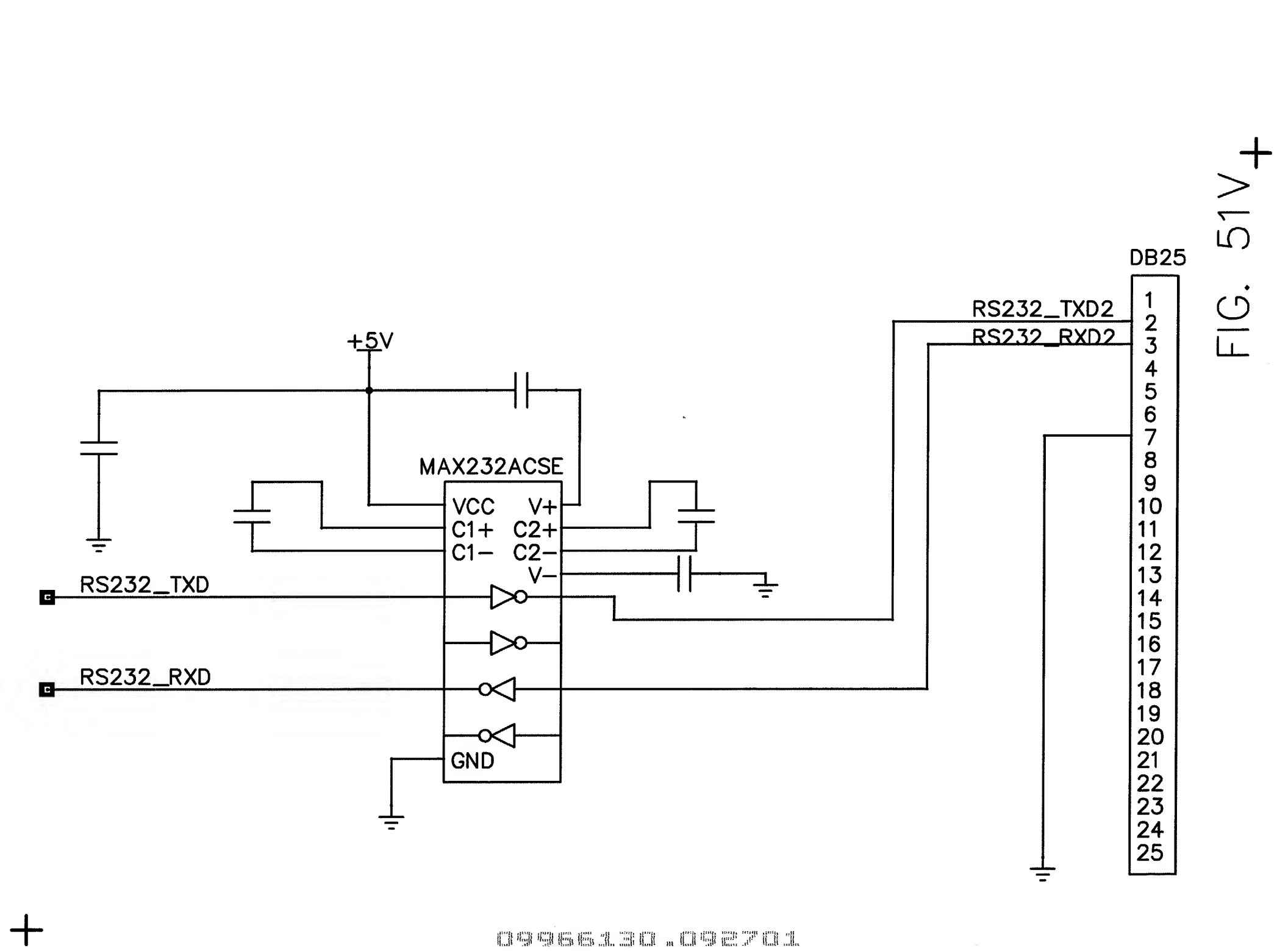


FIG. 51

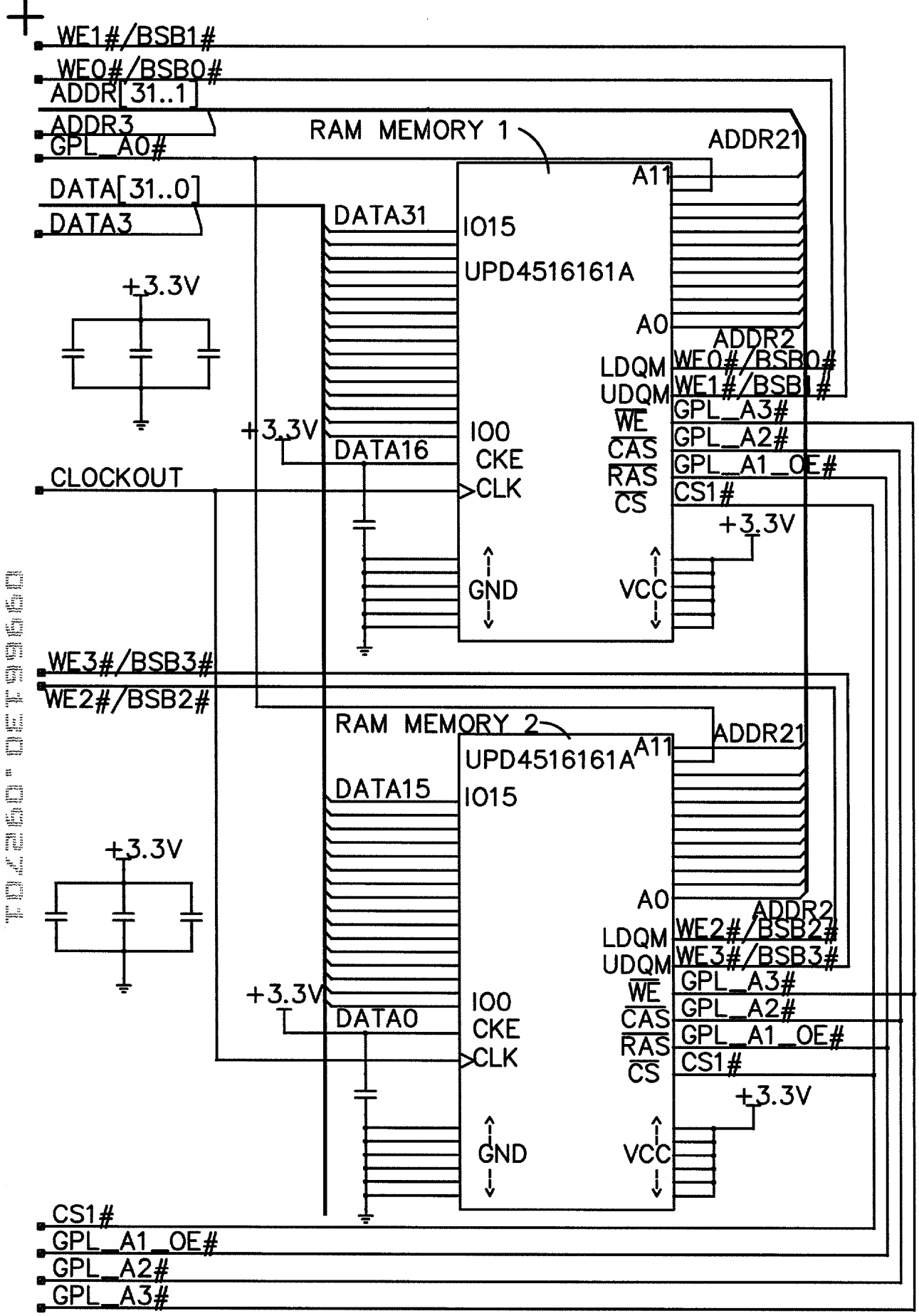

WE1#/BSB1#
WE0#/BSB0#
ADDR[31..1]
ADDR3
GPL_A0#
DATA[31..0]
DATA3
RAM MEMORY 1
ADDR21
A11
DATA31
IO15
UPD4516161A
A0
ADDR2
WE0#/BSB0#
LDQM
WE1#/BSB1#
UDQM
GPL_A3#
WE
GPL_A2#
CAS
GPL_A1_OE#
RAS
CS1#
CS
+3.3V
DATA16
IO0
CKE
CLK
CLOCKOUT
GND
VCC
WE3#/BSB3#
WE2#/BSB2#
RAM MEMORY 2
ADDR21
UPD4516161A
A11
DATA15
IO15
A0
ADDR2
WE2#/BSB2#
LDQM
WE3#/BSB3#
UDQM
GPL_A3#
WE
GPL_A2#
CAS
GPL_A1_OE#
RAS
CS1#
CS
+3.3V
DATA0
IO0
CKE
CLK
GND
VCC
CS1#
GPL_A1_OE#
GPL_A2#
GPL_A3#

FIG. 51W

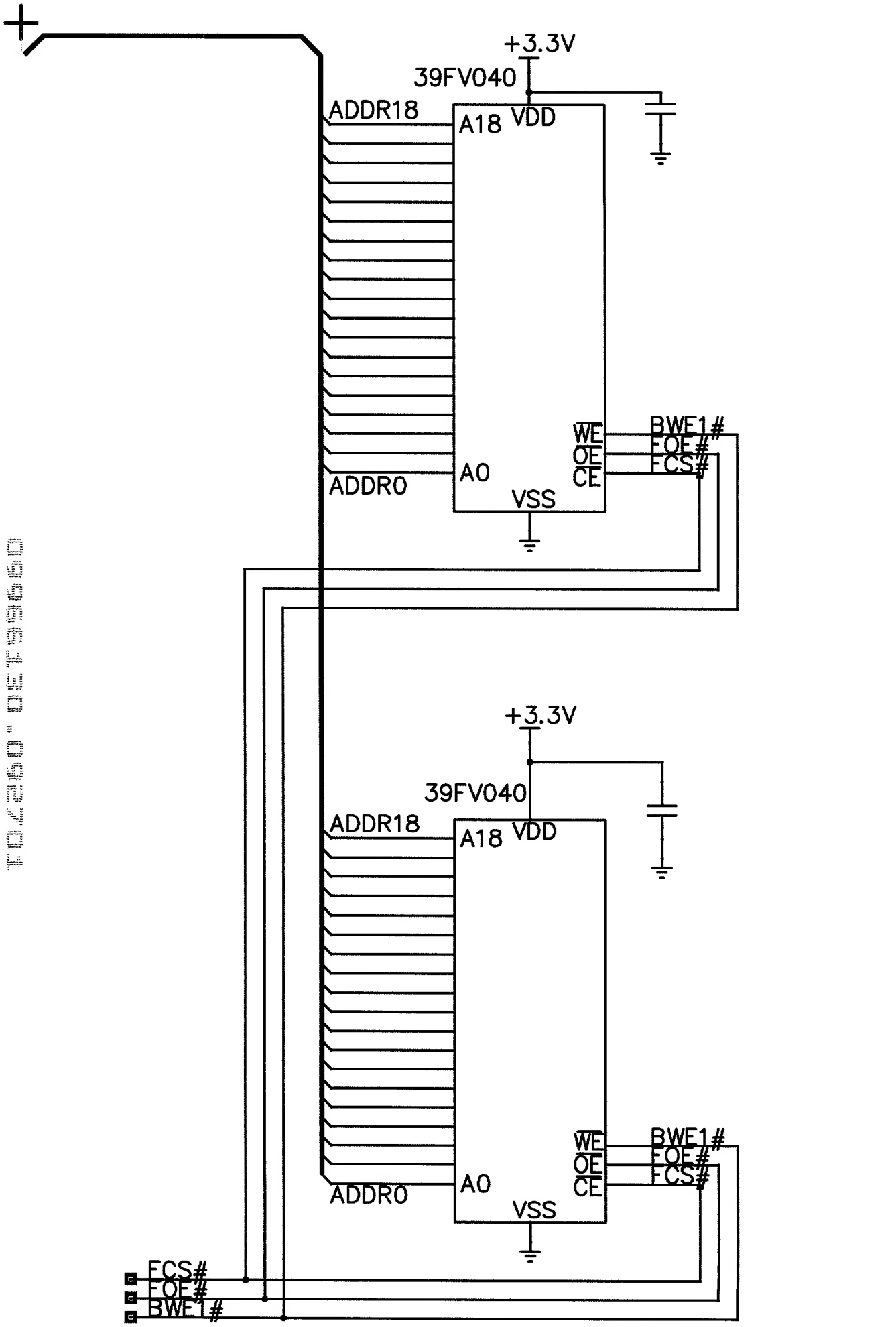

+3.3V
39FV040
ADDR18
A18
VDD
WE
OE
CE
BWE1#
FOE#
FCS#
A0
ADDR0
VSS
+3.3V
39FV040
ADDR18
A18
VDD
WE
OE
CE
BWE1#
FOE#
FCS#
A0
ADDR0
VSS
FCS#
FOE#
BWE1#

FIG. 51X

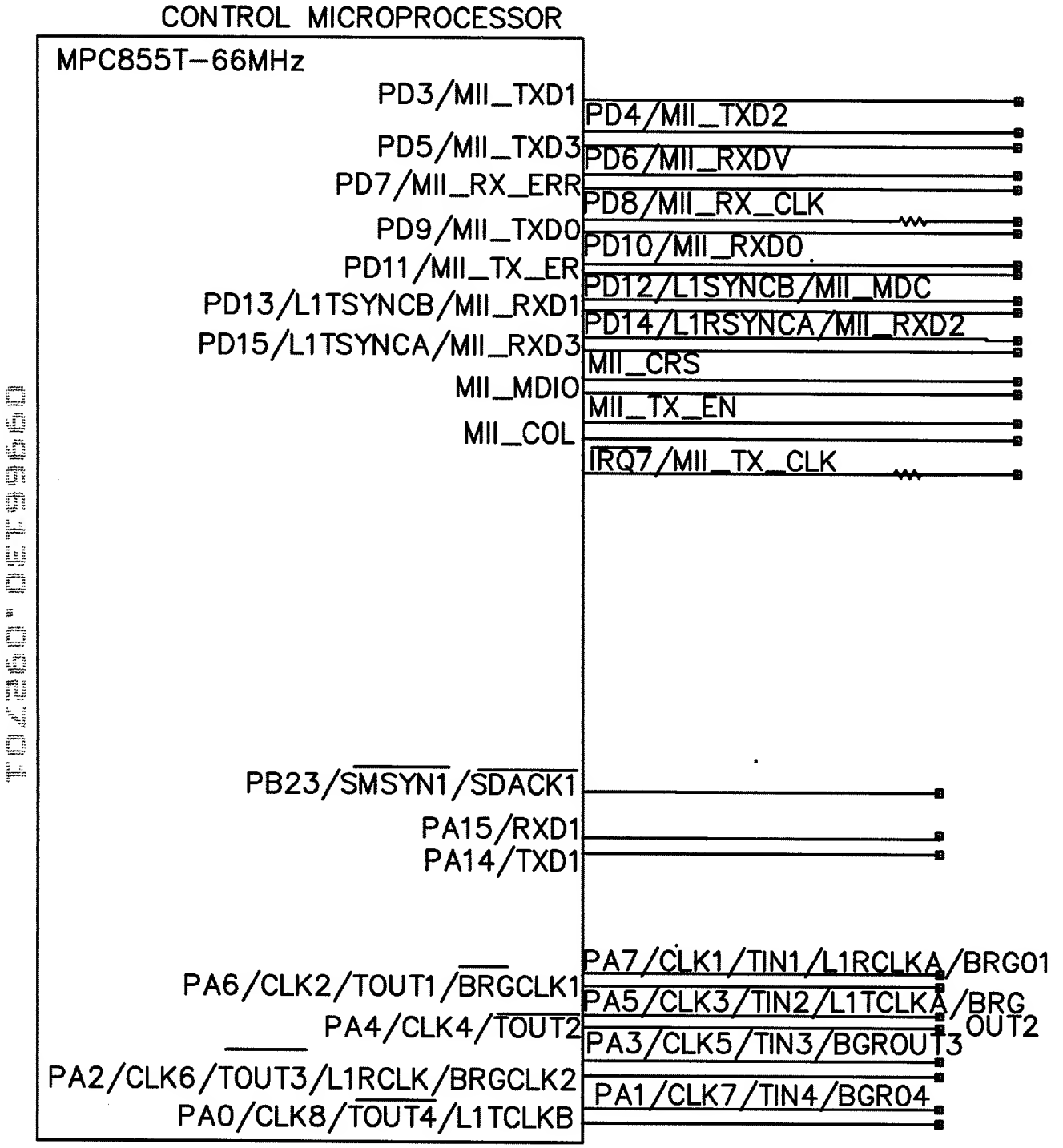

CONTROL MICROPROCESSOR
MPC855T-66MHz
PD3/MII_TXD1
PD4/MII_TXD2
PD5/MII_TXD3
PD6/MII_RXDV
PD7/MII_RX_ERR
PD8/MII_RX_CLK
PD9/MII_TXD0
PD10/MII_RXD0
PD11/MII_TX_ER
PD12/L1SYNCB/MII_MDC
PD13/L1TSYNCB/MII_RXD1
PD14/L1RSYNCA/MII_RXD2
PD15/L1TSYNCA/MII_RXD3
MII_CRS
MII_MDIO
MII_TX_EN
MII_COL
IRQ7/MII_TX_CLK
PB23/SMSYN1/SDACK1
PA15/RXD1
PA14/TXD1
PA7/CLK1/TIN1/L1RCLKA/BRG01
PA6/CLK2/TOUT1/BRGCLK1
PA5/CLK3/TIN2/L1TCLKA/BRG
PA4/CLK4/TOUT2
OUT2
PA3/CLK5/TIN3/BGROUT3
PA2/CLK6/TOUT3/L1RCLK/BRGCLK2
PA1/CLK7/TIN4/BGR04
PA0/CLK8/TOUT4/L1TCLKB

FIG. 51Y

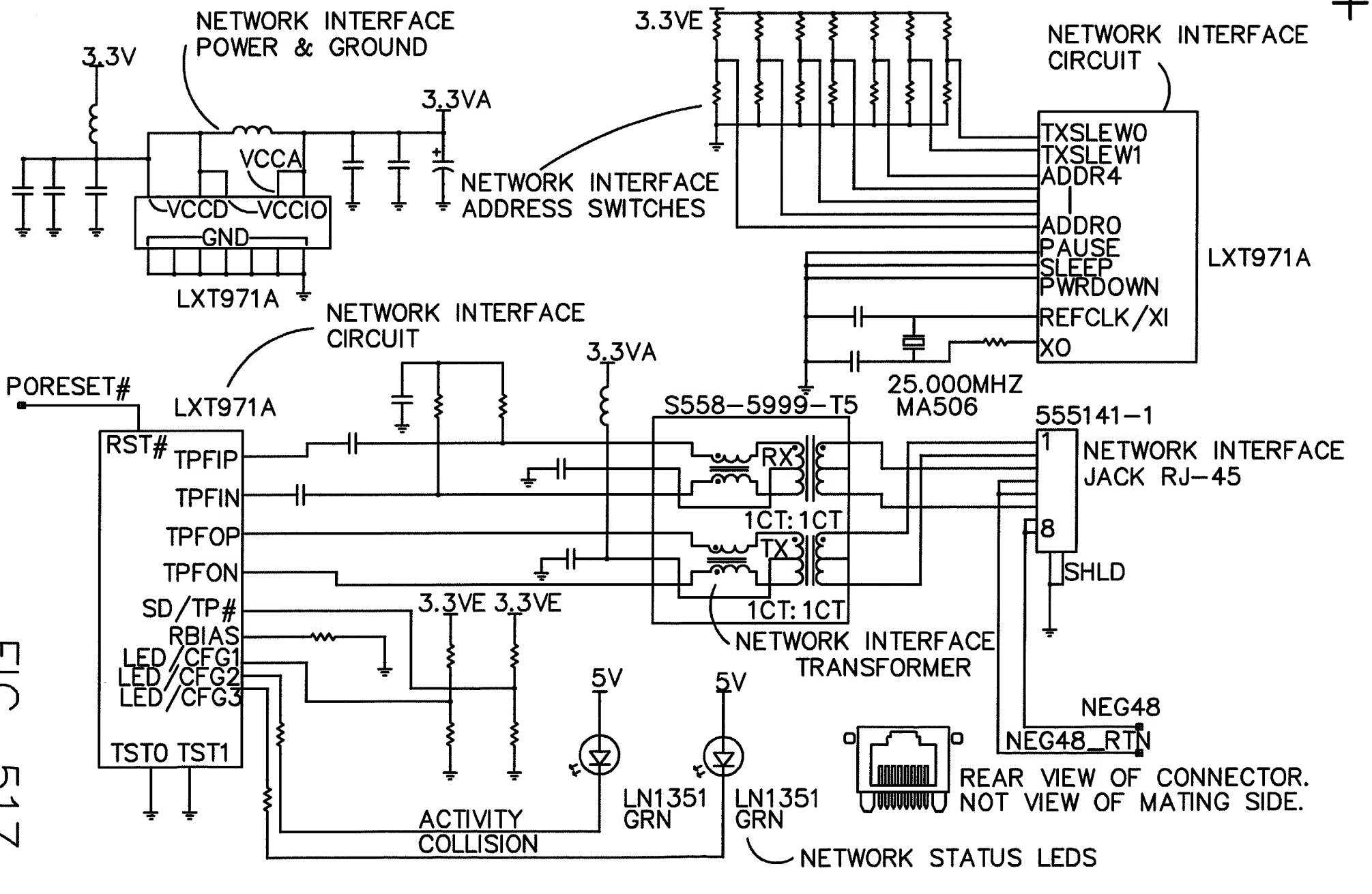

NETWORK INTERFACE
POWER & GROUND
3.3V
3.3VA
VCCA
VCCD
VCCIO
GND
LXT971A
NETWORK INTERFACE
ADDRESS SWITCHES
3.3VE
NETWORK INTERFACE
CIRCUIT
TXSLEW0
TXSLEW1
ADDR4
ADDR0
PAUSE
SLEEP
PWRDOWN
REFCLK/XI
XO
LXT971A
25.000MHZ
MA506
NETWORK INTERFACE
CIRCUIT
LXT971A
PORESET#
RST#
TPFIP
TPFIN
TPFOP
TPFON
SD/TP#
RBIAS
LED/CFG1
LED/CFG2
LED/CFG3
TST0 TST1
3.3VA
S558-5999-T5
RX
1CT:1CT
TX
1CT:1CT
NETWORK INTERFACE
TRANSFORMER
3.3VE 3.3VE
555141-1
1
8
NETWORK INTERFACE
JACK RJ-45
SHLD
NEG48
NEG48_RTN
REAR VIEW OF CONNECTOR.
NOT VIEW OF MATING SIDE.
5V
5V
LN1351
GRN
LN1351
GRN
ACTIVITY
COLLISION
NETWORK STATUS LEDS

FIG. 51Z

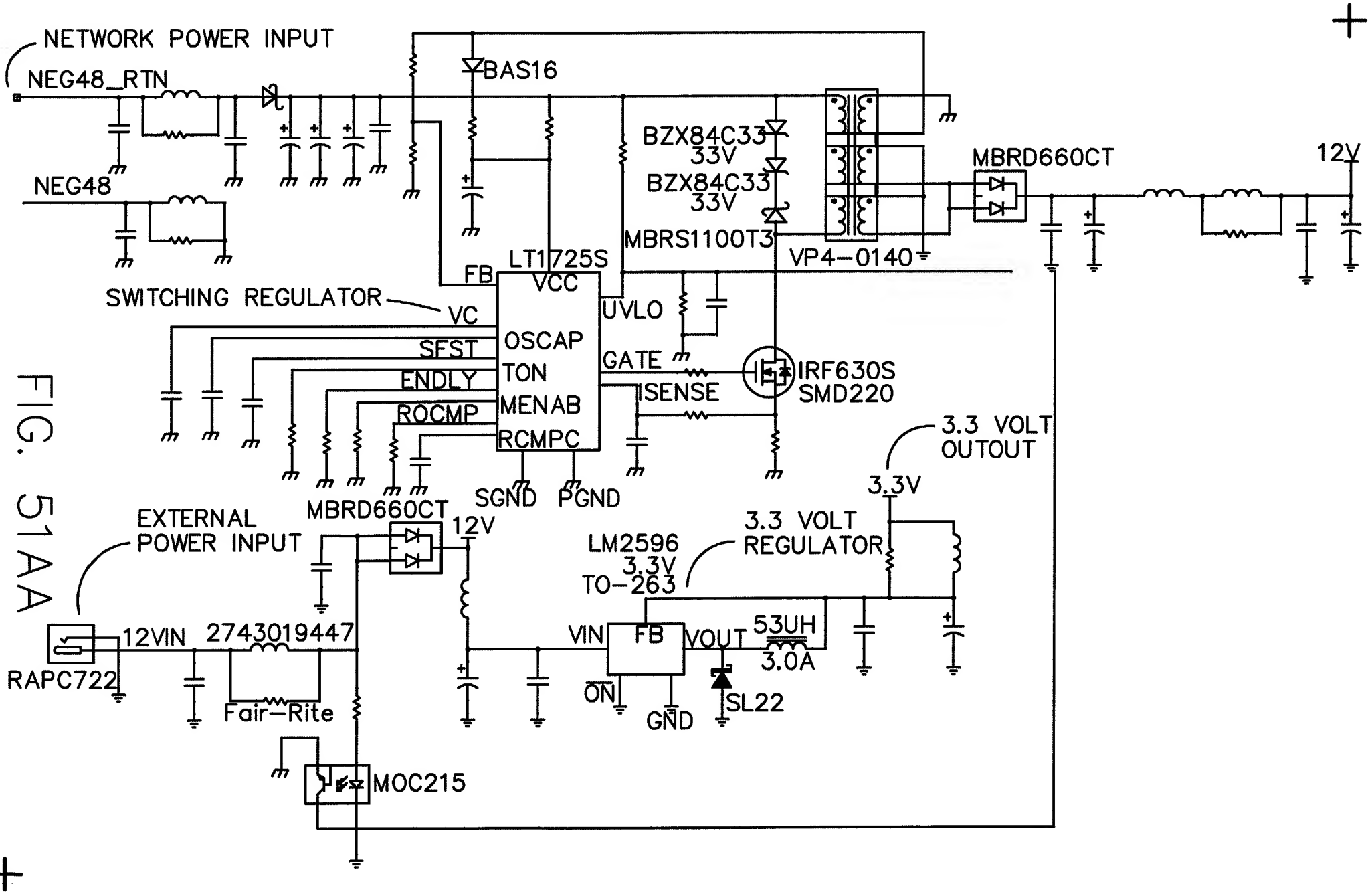


FIG. 51AA

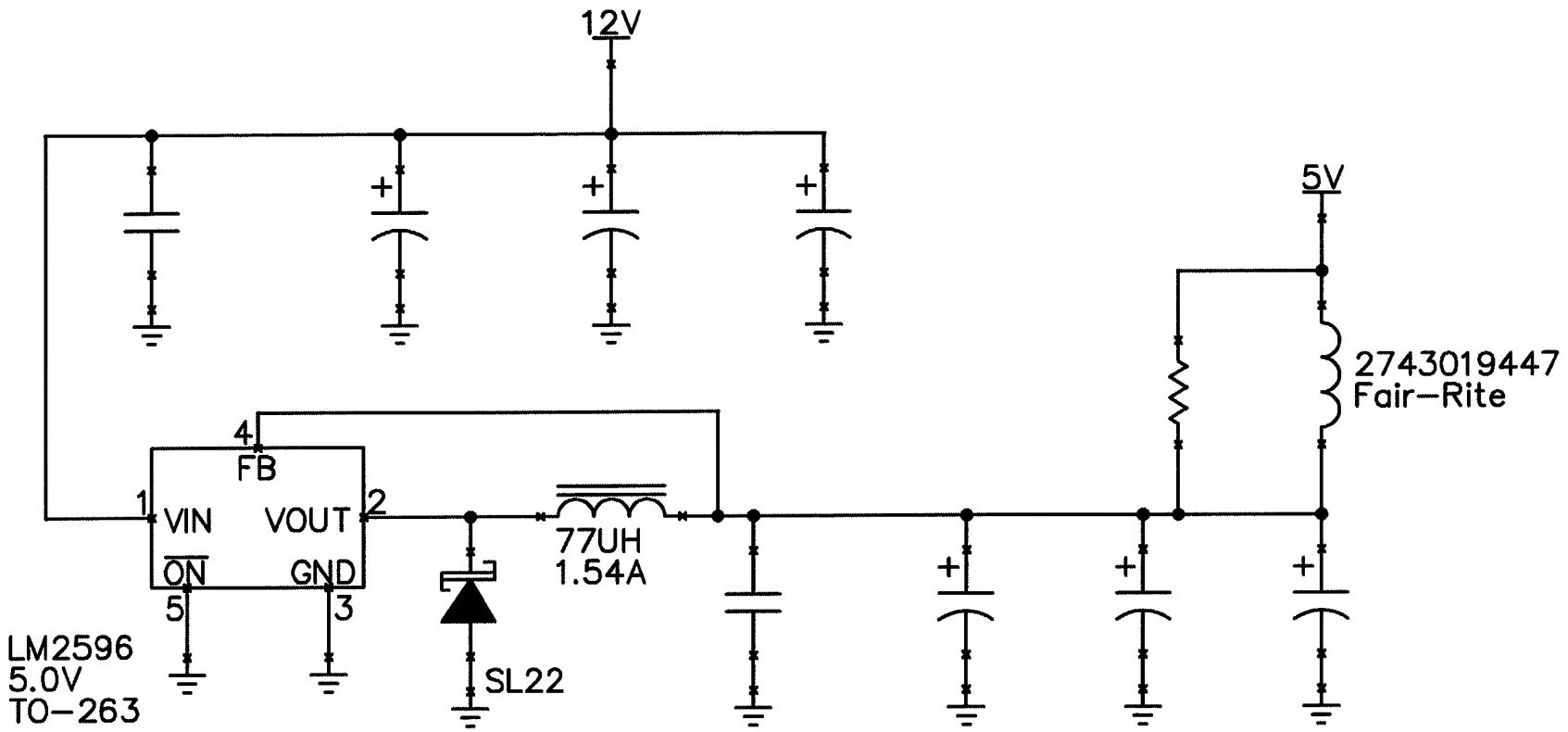


FIG. 51BB

5.0 V REG CIN
3 EACH OF NICHICON PARTS:
UUD1E270MCR1GS
UUD1V270MCR1GS
UUD1E330MCR1GS
UUD1V330MCR1GS
UUD1E470MCR1GS
UUD1V470MCR1GS

5.0 V REG COUT
1EA PANASONIC EEVFC2A680Q
3 EA NICHICON:
UUD1E270MCR1GS
UUD1V270MCR1GS
UUD1C330MCR1GS
UUD1E330MCR1GS
UUD1V330MCR1GS
UUD1A470MCR1GS